ROUTLEDGE HANDBOOKS

Handbook of Sexuality-Related Measures

Fourth Edition

Robin R. Milhausen, John K. Sakaluk, Terri D. Fisher,
Clive M. Davis, and William L. Yarber

eRESOURCES

Handbook of Sexuality-Related Measures

This classic and invaluable reference handbook, written for sex researchers and their students, has now been completely revised in a new, fourth edition. It remains the only easy and efficient way for researchers to learn about, evaluate, and compare instruments that have previously been used in sex research.

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Edited by

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Contents

Preface

"Discovery consists of seeing what everybody has seen and thinking what nobody has thought."
-Albert szent-Gyorgyl (1893–1986)

The Handbook of Sexuality-Related Measures has a long and rich history. . . Here's how it began. On a flight to Jerusalem in 1981 for the 5th Congress of Sexology, passengers Bill Yarber and Clive Davis were talking about sex research and Bill expressed his frustration about the difficulty of acquiring standardized sexuality-related measures from authors of sex research studies. He suggested to Clive that they should edit a compendium of available measures, and Clive agreed that such a handbook was needed. Seven years later in 1988, Clive M. Davis, William L. Yarber, and Sandra L. Davis published *Sexuality-Related Measures: A Compendium*—the first edition of what has since evolved into the *Handbook of Sexuality-Related Measures*. Although much has changed in our field, much also remains the same. Sexual scientists still routinely rely on questionnaire-based assessments of attitudes, behaviors, beliefs, emotions, and experiences. And although online scholarly databases have made it easier than ever before to quickly search for a measure of a given construct, it can be difficult to keep up with the rapid pace at which measures are published in our field. Researchers therefore face new challenges in efficiently finding either the go-to classic measures or new up-and-coming assessments within a given field of sexual science. Our new edition of the *Handbook* is poised to continue serving the needs of the sexual science community by helping to connect researchers to the high-quality assessments in their areas of scholarly interest.

Whereas the overarching goals of this new edition of the *Handbook* have remained the same as for previous editions, there are many new areas of substantial change to its contents, features, organization, and the personnel involved. Continuing the outstanding work done under Terri Fisher's leadership on the third edition of the *Handbook*, Robin Milhausen was called upon to lead the charge with this new fourth edition, following in the footsteps of leaders in the field who have inspired and mentored her throughout her career. Robin is well known for her scholarly passion for all things sexual science. Her values—commitment to mentorship across academic generations, strong and sound scholarship, and inclusive research—are well represented in the new edition of the *Handbook*. She brings with her into the fold John Sakaluk, a social psychologist at the University of Victoria who is known for his love of advanced statistics and psychological measurement.

Bringing together an edited volume of more than 200 entries has involved a steep learning curve for the two newly minted editors, and they are sincerely appreciative of the assistance, enthusiasm, support, and wisdom with which the original editorial team of Terri, Bill, and Clive have generously supplied them. We are also so grateful to the authors of the entries in the *Handbook*. With you, we have exchanged literally thousands of emails. You have responded to queries, reviewed multiple sets of proofs, and participated in the process enthusiastically over the two years we have spent developing and finalizing the book. One of the greatest joys in this process for Robin and John has been getting to know so many leaders in the field as they prepared, submitted, and approved their entries. We hope these collaborative relationships will continue for many years to come.

The new edition of the *Handbook* delivers nearly 90 new measures, all of which were scrutinized with regard to consistent standards of methodological and analytic rigor. For example, we looked for measures which were developed using ground-up qualitative work, or developed and validated using exploratory and confirmatory factor analysis. Some of these entries are measures in new areas that we are extremely proud to now have represented in the *Handbook*, including, for example, more

inclusive measures of gender (Chapter 15) and sexual identity (Chapter 18), as well as measures used in burgeoning areas like relationship science (Chapter 19) and forensic and clinical psychology (Chapters 1 and 22). Of course, adding so much new content to this edition of the *Handbook* meant that we had to remove some entries from prior editions. This process was informed by a review of measures from previous editions to determine which were (or were not) being used in present-day research. We sought to include "classic" assessments that were influential in earlier programs of research within their fields. Of those measures which are being republished in the current edition, details for more than 80 have also been updated by the corresponding authors, meaning that readers can quickly identify the most up-to-date measurement and validity-related information.

Two additional features of the new edition of the *Handbook* may stand out to long-time readers of previous editions. First, the table of contents has seen a dramatic reorganization and pairing down, from over 100 "chapters" to a leaner 29. This change, we hope, will help to make the table of contents more intuitive and therefore more useful to the everyday user, as each chapter now has improved internal homogeneity and external heterogeneity. And second, we have added to the *Handbook* for the first time a set of supplementary materials for each measure, in an effort to make the measures from the *Handbook* easier than ever before to integrate into new and ongoing research programs. These materials include Qualtrics .qsf files for online survey distribution, and analytic files for creating (sub)scale scores from participant data. All supplemental resources will be available at the books Routledge web page for download (https://www.routledge.com/Handbook-of-Sexuality-Related-Measures/Fisher-Davis-Yarber-Milhausen-Sakaluk/p/book/9781138740846). Together, these supplementary files should help to streamline the scientific workflow from data collection to data analysis using measures from the *Handbook*, all the while increasing the reproducibility of the underlying sexual science. We hope you find the book as useful in your work as we have found past editions in our own research programs. It has been an honour and a pleasure to bring this 4th edition of the *Handbook of Sexuality-Related Measures* to the field.

Acknowledgements

Any edited book of this magnitude would not be possible to deliver without a considerable basis of support. We first wish to thank the authors—both new and returning—for their contributions to the fourth edition of the *Handbook*, and their patience in navigating this process with our first-time editors. Special thanks are also in order to Anna Markov, Maria Tetro, Madison Myers, Robyn Kilshaw, and Maria Baranova—research assistants in Robin's and John's labs who provided invaluable assistance with the organization and editing of the entries and exhibits for each measure, as well as the creation of the supplemental materials. We are also grateful to Chelsea Kilimnik for contributing her beautiful artwork to the cover of the new edition. Endless thanks are also owed to Steve Jett and Sally Yue Lin for their love, patience, and support of Robin and John as they became absorbed in the joys and trials of becoming first-time book editors. Also many thanks to the staff at the coffee shops where much of the *Handbook* work took place (The Red Brick, Williams, the Monarch Café in particular). Finally, we wish to thank everyone at Routledge who has assisted in the completion of this project, especially Erik Zimmerman, as well as Julian Webb and Hamish Ironside from Swales & Willis.

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1 Abuse and Pedophilia

Childhood Sexual Abuse Scale

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The Child Sexual Abuse Scale (CSAS; Aalsma, Zimet, Fortenberry, Blythe, & Orr, 2002) is a self-report instrument that was developed to measure the occurrence of childhood sexual abuse in adolescent and adult populations. The measurement of childhood sexual abuse varies widely from brief, single-item measures to lengthy clinical interviews. Many measures of childhood sexual abuse are interviews or are lengthy self-report inventories, which are difficult to incorporate into studies assessing many areas of sexual functioning and behavior. This scale was developed with two issues in mind. First, a benefit of the current measure is it is very brief (four items) and can be utilized in a wide variety of studies. Second, because the CSAS is a multiple-item rather than single-item measure, internal reliability can be assessed.

The CSAS consists of four items. Participants are instructed that the items refer to events that may have occurred prior to age 12. The use of this particular age cutoff was based, in part, on focus groups with adolescents in which the participants reached a consensus that the term childhood sexual abuse involved events occurring up to 12 years of age. We also wanted the CSAS to address an age range during which consensual sexual experiences were less likely. In order to maintain brevity, the CSAS did not include items regarding the specific nature of the abuse (e.g., whether penetration was involved) or the participant's relationship with the perpetrator. Given that the age range for childhood sexual abuse is set at below 12, as well as the reading level of this scale, it is most appropriate for adolescent and adult populations.

Development

The CSAS was developed for a research project (Aaslma et al., 2002) with the intent to develop a brief, multi-item tool to assess for childhood sexual abuse.

Response Mode and Timing

The participants are asked to select 1 (*Yes*) or 0 (*No*) to each statement.

Scoring

The total score for this scale is calculated by summing across items and can range from 0 to 4.

Reliability

The CSAS was originally utilized in a study of female adolescent and young adult subjects (14 to 24 years of age, $N = 217$) recruited from urban health clinics and a sexually transmitted disease clinic in a large midwestern city. The scale, measuring a single construct, demonstrated excellent internal reliability at baseline ($\alpha = .81$) and seven-month follow-up ($\alpha = .84$; Aalsma et al., 2002).

Validity

The content validity of this scale was established by exploring other childhood sexual abuse scales. When compared to other scales, the current CSAS demonstrates strong face validity. Support for the construct validity of the CSAS is demonstrated by its relationship with other variables. In the original study assessing the role of consistent reporting of childhood sexual abuse, consistent nonreporters of childhood sexual abuse were compared to inconsistent (endorsed at least one item at one time point and not at another time point) and consistent reporters of childhood sexual abuse. We found that reporters (either inconsistent or consistent) endorsed marked increases in measures of pathology (i.e., depression) and health-compromising behavior (i.e., sexual coercion and lifetime sexual partners). Moreover, a linear trend was evident with lifetime number of sexual

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partners and depression. Consistent reports of childhood sexual abuse reported the highest number of sexual partners and increased depression. Lastly, we conducted a logistic regression in order to predict membership in the consistent or inconsistent reporting group. The results indicated that adolescents who endorsed at least two items on the CSAS were over five times more likely to be consistent childhood sexual abuse reporters. The results of this analysis demonstrate the utility and importance of using a scale rather than a single-item measure to measure childhood sexual abuse. The above findings were extended in an additional analysis with the same sample (Fortenberry & Aalsma, 2003).

The CSAS was also employed in a study of homeless youth (Rew, Whittaker, Taylor-Seehafer, & Smith, 2005). Significant differences among homeless youth by sexual orientation categories on the CSAS were found. Specifically, gay and lesbian youth were more likely to have left home due to sexual abuse than heterosexual and bisexual youth. The authors of the study utilized the full scale as well as individual items in the analysis.

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Exhibit

Childhood Sexual Abuse Scale

These next questions are about activity before you were 12 years old.

	Yes	No
1. Someone tried to touch me in a sexual way against my will.	○	○
2. Someone tried to make me touch them in a sexual way against my will.	○	○
3. I believe that I have been sexually abused by someone.	○	○
4. Someone threatened to tell lies about me or hurt me unless I did something sexual with them.	○	○

Empathy for Children Scale

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The Empathy for Children Scale (ECS) was developed to measure an individual's cognitive and emotional empathy for child victims by rating 75 short statements regarding intensity of feelings, thoughts, and behaviours on a 5-point Likert scale. Three scenarios are used: assessing empathy with respect to an "accident victim," a "stranger child sexual abuse victim," and "(fantasized) own child sexual abuse victim." The ECS can be used as a research tool in examining respective empathy (deficits) of various subsamples. It can also serve as a clinical tool for therapists in treatment planning and treatment outcome assessment.

Development

The ECS is based on the Child Molester Empathy Measure (CMEM; Fernandez & Marshall, 2003; Fernandez, Marshall, Lightbody, & O'Sullivan, 1999), in that it uses the same three scenarios to assess empathy for child victims

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using two subscales (cognitive and emotional empathy) for each scenario. However, as the ECS was specifically developed for administration with pedophilic nonoffenders, the original "own child sexual abuse victim" scenario was modified to offer a fantasized own victim. Changes to the scenarios also improved the comparability of the scenarios. Furthermore, the ECS assesses data regarding age and gender of stranger sexual abuse victim and (fantasized) own victim. The ECS uses shorter Likert-type scales (5-point versus 11-point) to rate only 75 items (versus 150) and, thus, is less complex and more economic. The instrument is available in English, French, and German (Feelgood & Schaefer, 2005).

Response Mode and Timing

Respondents are to rate on a 5-point Likert-type scale ranging from 0 (*not at all*) to 4 (*very much*) regarding how the child might feel (cognitive empathy) and how they feel (emotional empathy) when imagining what the child experienced. It typically takes 15 to 20 minutes to complete the measure.

Scoring

The items for each subscale are added to form total scores, i.e., for cognitive empathy (Items 1 through 15 for each scenario) and emotional empathy (Items 1 through 10 for each scenario). Higher scores indicate more empathy. Items 4 and 7 are reverse scored for cognitive empathy, and Items 1, 8, and 9 are reverse scored for emotional empathy. It is possible to have an overall empathy score for each scenario by simply adding the total scores for cognitive and emotional empathy for the respective scenarios.

Reliability

Volunteers in the *Berlin Prevention Project Dunkelfeld* (PPD) for men with a sexual preference including minors completed the ECS ($N = 150$; 83 reporting sexual contacts with children, 67 non-offenders; Beier, Ahlers et al., 2009; Beier, Neutze et al., 2009). Cognitive distortion and social desirability were controlled using the Bumby MOLEST Scale (BMS; Bumby, 1996; German version by Feelgood, Schaefer, & Hoyer, 2008) and the Balanced Inventory of Desirable Responding (BIDR-20; Paulhus, 1991; German version by Musch, Brockhaus, & Bröder, 2002). Significant correlations with the BMS cognitive distortion scale were found (rs between –.42 and –.50) as was one small correlation with social desirability ($r = –.19$ for accident victim). Internal consistency ($\alpha = .96$) supports the structure of the scale (Schaefer & Feelgood, 2006).

Further studies conducted within the PPD assessed victim empathy deficits in pedophilic men, and internal consistency was reported to be good to excellent for the cognitive ($\alpha = .98$) and emotional victim empathy subscales (α's = .95–.96; Amelung, Kuhle, Konrad, Pauls, & Beier, 2012; Beier et al., 2015; Neutze, Grundmann, Scherner, & Beier, 2012; Neutze, Seto, Schaefer, Mundt, & Beier, 2011). These studies excluded the "accident victim" scenario and used a 5-point Likert-type response scale ranging from 1 (*not at all*) to 5 (*very much*). Accordingly, the overall cognitive victim empathy subscale includes 30 items (value range 30–150), and the overall emotional victim empathy subscale includes 20 items (value range 20–100). Neutze et al. (2012) reported means and standard deviations for the cognitive ($M = 74.90$, $SD = 30.14$) and the emotional ($M = 46.18$, $SD = 18.22$) victim empathy subscale for undetected pedophilic offenders ($N = 196$). Normative data are not available for the scale.

Validity

Comparing child sexual abuse offenders diagnosed with pedophilia, no differences were found between undetected and detected offenders concerning emotional empathy regarding their own victims (Schaefer, Neutze, Mundt, & Beier, 2008). Similar profiles to those found in samples of detected offenders were identified in a sample of PPD offenders (i.e., undetected child sexual abuse offenders). They displayed less empathy for their own victim than for other victims of child sexual abuse and the greatest empathy for a child car accident victim (Schaefer & Feelgood, 2006). Differences between these groups support discriminant validity. The lack of social desirability responding relative to the ECS supports divergent validity.

When comparing subgroups of sexual offenders against children, no differences on the ECS were found between undetected and detected pedophilic offenders concerning emotional empathy deficits (Neutze et al., 2012). Also, no differences on the ECS were found when comparing undetected and detected pedophilic sexual offenders against children based on their lifetime offense history (Neutze et al., 2011). The ECS did, however, differentiate pedophilic sexual offenders who persisted in their offending behavior from pedophilic offenders who desisted from further offending after having received treatment (Beier et al., 2015).

With regard to sensitivity to change, when comparing treatment changes in dynamic risk factors in pedophilic men in a waiting list control design, treated subjects have been found to self-report less emotional victim empathy deficits while no differences were found for subjects of the control group (Beier et al., 2015).

Other Information

Delete text passages presented in italics in the Exhibit below in stories 2 and 3 when using the measure with known offenders (e.g., convicted offenders).

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Exhibit

Empathy for Children Scale

In the following you will find three short stories. You will be asked to indicate at first how you believe the child in the story feels, and afterwards how you feel when thinking about the child.

Story 1

Imagine a child that was badly injured in road traffic and had to spend some time in a hospital. The child is now out of a hospital and will live with a permanent disability. In your opinion, how may the child feel or have felt, what may it experience or have experienced while in a hospital and afterwards? For each of the following descriptions, please select the response that best indicates *the child's experience.*

The child …

	0 Not At All	1	2	3	4 Very Much
1. …feels guilty.	○	○	○	○	○
2. …feels sad.	○	○	○	○	○
3. …feels angry.	○	○	○	○	○
4. …is self-confident.	○	○	○	○	○
5. …has nightmares.	○	○	○	○	○
6. …has suicidal thoughts.	○	○	○	○	○
7. …is successful in school.	○	○	○	○	○

8. …has sleep disturbances.	○	○	○	○	○
9. …feels lonely.	○	○	○	○	○
10. …is withdrawn from others.	○	○	○	○	○
11. …has psychological problems.	○	○	○	○	○
12. …feels helpless.	○	○	○	○	○
13. …is suffering.	○	○	○	○	○
14. …is tense.	○	○	○	○	○
15. …feels ashamed.	○	○	○	○	○

Now please select the response that best indicates *how you feel* when imagining what the child experienced.

I feel …/I am …

	0 Not At All	1	2	3	4 Very Much
1. …cheerful.	○	○	○	○	○
2. …furious.	○	○	○	○	○
3. …disturbed.	○	○	○	○	○
4. …distraught.	○	○	○	○	○
5. …devastated.	○	○	○	○	○
6. …helpless.	○	○	○	○	○
7. …upset.	○	○	○	○	○
8. …good.	○	○	○	○	○
9. …stimulated.	○	○	○	○	○
10. …shocked.	○	○	○	○	○

How old was the child you imagined?

Of what gender was the child you imagined?

○ Female
○ Male

Story 2

Now imagine a child that had sex with an adult male (the relationship with the child as well as the nature and frequency of sexual contact match your own sexual experience with children). *If you have not had any sexual experience with children, then imagine the story matches your usual sexual fantasies of children*. In your opinion, how may the child feel or have felt, what may it experience or have experienced while this sexual contact was occurring and afterwards?

For each of the following descriptions, please select the response that best indicates *the child's experience*.

The child …

	0 Not At All	1	2	3	4 Very Much
1) …feels guilty.	○	○	○	○	○
2) …feels sad.	○	○	○	○	○
3) …feels angry.	○	○	○	○	○
4) …is self-confident.	○	○	○	○	○
5) …has nightmares.	○	○	○	○	○

6) …has suicidal thoughts.	○	○	○	○	○
7) …is successful in school.	○	○	○	○	○
8) …has sleep disturbances.	○	○	○	○	○
9) …feels lonely.	○	○	○	○	○
10) …is withdrawn from others.	○	○	○	○	○
11) …has psychological problems.	○	○	○	○	○
12) …feels helpless.	○	○	○	○	○
13) …is suffering.	○	○	○	○	○
14) …is tense.	○	○	○	○	○
15) …feels ashamed.	○	○	○	○	○

Now please select the response that best indicates *how you feel* when imagining what the child experienced.

I feel …/I am …

	0 Not At All	1	2	3	4 Very Much
1. …cheerful.	○	○	○	○	○
2. …furious.	○	○	○	○	○
3. …disturbed.	○	○	○	○	○
4. …distraught.	○	○	○	○	○
5. …devastated.	○	○	○	○	○
6. …helpless.	○	○	○	○	○
7. …upset.	○	○	○	○	○
8. …good.	○	○	○	○	○
9. …stimulated.	○	○	○	○	○
10. …shocked.	○	○	○	○	○

How old was the child you imagined?

_____

Of what gender was the child you imagined?

○ *Female*
○ *Male*

Story 3

Now think of a child with whom you have had sexual contact. *If you have not had any sexual contact with children, please imagine a child you had or have sex with in your fantasies*. In your opinion, how may the child feel or have felt, what may it experience or have experienced while this sexual contact was occurring and afterwards?

For each of the following descriptions, please select the response that best indicates *the child's experience*.

If you have not had any sexual contact with children…

○ *…please check this box*

The child …

	0 Not At All	1	2	3	4 Very Much
1. …feels guilty.	○	○	○	○	○
2. …feels sad.	○	○	○	○	○
3. …feels angry.	○	○	○	○	○
4. …is self-confident.	○	○	○	○	○
5. …has nightmares.	○	○	○	○	○
6. …has suicidal thoughts.	○	○	○	○	○
7. …is successful in school.	○	○	○	○	○
8. …has sleep disturbances.	○	○	○	○	○
9. …feels lonely.	○	○	○	○	○
10. …is withdrawn from others.	○	○	○	○	○
11. …has psychological problems.	○	○	○	○	○
12. …feels helpless.	○	○	○	○	○
13. …is suffering.	○	○	○	○	○
14. …is tense.	○	○	○	○	○
15. …feels ashamed.	○	○	○	○	○

Now please select the response that best indicates *how you feel* when imagining what the child experienced.

If you have not had any sexual contact with children …

○ *…please check this box*

I feel …/I am …

	0 Not At All	1	2	3	4 Very Much
1. …cheerful.	○	○	○	○	○
2. …furious.	○	○	○	○	○
3. …disturbed.	○	○	○	○	○
4. …distraught.	○	○	○	○	○
5. …devastated.	○	○	○	○	○
6. …helpless.	○	○	○	○	○
7. …upset.	○	○	○	○	○
8. …good.	○	○	○	○	○
9. …stimulated.	○	○	○	○	○
10. …shocked.	○	○	○	○	○

How old was the child you imagined?

Of what gender was the child you imagined?

○ *Female*
○ *Male*

Revised Screening Scale for Pedophilic Interests

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The Revised Screening Scale for Pedophilic Interests (SSPI-2) is a 5-item, revised version of the original Screening Scale for Pedophilic Interests (SSPI; Seto & Lalumière, 2001). Like the SSPI, it was designed to be a measure of pedophilic sexual interest among men aged 18 and over who have committed (based on charges or self-report) at least one sexual offense against a child younger than age 15. The sexual offense against a child can involve contact offenses or non-contact offenses (such as exhibitionism), but cannot involve child pornography offenses only.

Development

The SSPI and SSPI-2 can be considered as brief actuarial screening measures of pedophilic sexual interest. Their total scores are positively correlated with phallometrically assessed sexual arousal to children, self-reported interest in children, and viewing time for images of children, relative to adults (Schmidt, Babchishin, & Lehmann, 2017; Seto, Stephens, Cantor, & Lalumière, 2017; Seto & Lalumière, 2001). The original SSPI items (i.e., having boy victims, having multiple child victims, having younger child victims, and having unrelated child victims) were drawn from the clinical and forensic research literatures regarding correlates of pedophilia among identified sex offenders. The four SSPI items were selected to be easy to code by evaluators with access to file information of reasonable quality, including clinicians, probation or parole officers, and law enforcement. The SSPI-2 involved a revision to the item weighting and added a fifth item regarding charges for child pornography offending. The addition of the child pornography item was based on research suggesting that child pornography is a strong indicator of pedophilic interest and on its incremental validity (e.g., Seto, Cantor, & Blanchard, 2006; Seto & Eke, 2015). Interviews are recommended to score the SSPI or SSPI-2, but the measure can also be coded solely from file information alone, if the files are of sufficient quality.

Scoring

SSPI-2 items are scored as present or absent, with each item present receiving one point. The total possible score for the SSPI-2 ranges from 0 to 5. Higher scores indicate a greater likelihood of the individual showing a pedophilic sexual arousal pattern in the laboratory, and thus a greater likelihood of having pedophilic interest.

The SSPI-2 is scored from clinical or probation/parole evaluations, which typically include interviews with the offender and file information detailing sexual offending history. A brief scoring guide is available online at a ResearchGate Project Page (www.researchgate.net/project/Screening-Scale-for-Pedophilic-Interests).

When scoring the SSPI-2, it is possible that self-report and file information are discrepant. When discrepant, the file is given more weight if the person denies part of their sexual offense history, whereas self-report is given more weight if the person admits to unrecorded child victims.

Given almost all the SSPI and SSPI-2 research has been conducted with adult men, the SSPI-2 is not currently recommended for clinical use with adolescents or women who have sexually offended against children, until additional research is conducted.

Reliability

There is limited information on the reliability of the SSPI or SSPI-2. Seto, Sandler, and Freeman (2017) examined the inter-rater reliability of the SSPI: 86 cases were scored by two coders and there was evidence of good interrater reliability (r = .90 and 84% agreement). Internal consistency is not relevant because the items were chosen to provide incremental validity.

Validity

In Seto and Lalumière (2001), SSPI scores were significantly and positively correlated with relative sexual arousal to children. Offenders with child victims could have an SSPI score from 0 to 5. In Seto and Lalumière's (2001) construction sample of 1,113 offenders with child victims, the median SSPI score was 3 (M = 2.8, SD = 1.4). Individuals with a score of 5 (in the original SSPI the boy victim item was assigned a score of 2 if it was present) were 4 times more likely to show greater penile response to children than to adults than

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were individuals with a SSPI score of 0 (72% vs. 18%). Similar results were obtained for the SSPI-2 in Seto, Stephens, et al. (2017).

The SSPI has been used in multiple research studies and typically shows expected correlations with other measures of sexual interest in children, including phallometrically assessed sexual arousal to child stimuli (the original criterion), relative viewing time measures, and self-report (e.g., Hermann, McPhail, Helmus, & Hanson, 2017; Nunes & Babchishin, 2012; Schmidt, Babchishin, & Lehmann, 2017). This includes a study demonstrating good criterion-related validity with adolescent males who have sexually offended against children (Seto, Murphy, Page, & Ennis, 2003) and two studies showing that SSPI scores can predict recidivism (Helmus, Ó Ciardha, & Seto, 2014; Seto, Harris, Rice, & Barbaree, 2004).

Seto, Stephens, et al. (2017) developed and cross-validated the SSPI-2 in a sample of 1900 Canadian men charged for sexual offenses against children (no overlap with the original sample used to construct the SSPI). Like the SSPI, the SSPI-2 was positively associated with phallometrically assessed sexual arousal to child stimuli. In a different sample, the SSPI-2 correlated positively with clinical ratings of sexual preoccupation, emotional identification with children, and sexual offense-related cognitions (concurrent validity) but was not correlated with ratings of self-regulation problems, noncompliance with supervision, or antisocial personality (discriminant validity). Also, the SSPI-2 performed slightly better than the SSPI in predicting sexual re-arrest in a sample of 2,416 New York offenders (Seto, Sandler, & Freeman, 2017).

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Exhibit

Revised Screening Scale for Pedophilic Interests

1. Any boy victim under the age of 15?
   - ○ Yes
   - ○ No
2. Multiple child victims under the age of 15?
   - ○ Yes
   - ○ No

3. Any child victim under the age of 12?
   - ○ Yes
   - ○ No
4. Any extrafamilial child victims under the age of 15?
   - ○ Yes
   - ○ No
5. Charged for possession of child pornography?
   - ○ Yes
   - ○ No

Unwanted Childhood Sexual Experiences Questionnaire

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The Unwanted Childhood Sexual Experiences Questionnaire can be used to document the age and extent of respondents' unwanted childhood sexual experiences with adults. Instructions intentionally refer to unwanted childhood sexual experiences rather than abusive sexual experiences or experiences of sexual victimization in an attempt to avoid unintended bias in reporting. The questionnaire includes 13 items which refer to different sets of behaviors. It defines an adult as someone who is at least 5 years older than the respondent.

Development

Items were drawn from a larger questionnaire designed by Finkelhor (1979) and have been used in other studies primarily with samples of adolescents and adults (e.g., Fromuth, 1986; Hartwick, Desmarais, & Hennig, 2007; Rich, Wilson, & Robertson, 2016; Stevenson & Gajarsky, 1992).

Response Mode and Timing

Respondents indicate in the space provided whether the unwanted sexual behaviors occurred and at what age or ages. The questionnaire can be completed in less than 5 minutes.

Scoring

The questionnaire allows for the reporting of the frequency with which each of the behaviors occurred in the sample as well as the ages at which each incident took place. Each of the 13 items refers to a different set of behaviors that can be categorized as minimal contact (Items 1–3), moderate contact (Items 4–8), or maximal contact (Items 9–13). The questionnaire has also been scored in other ways. Hartwick et al. (2007) asked respondents for yes or no answers to each questionnaire item. For each item, participants were given a score of 1 if they responded yes and 0 if they responded no. In contrast, an affirmative response to any of 6 items from the questionnaire was used by Bradford et al. (2015) to assess exposure to unwanted sexual encounters in a multivariate analysis.

Reliability

This questionnaire is intended to document whether specific unwanted behaviors have occurred. Using the alternative scoring scheme described above, Hartwick et al. (2007) reported a high level of reliability ($\alpha = .85$) in a sample of Canadian university students.

Validity

Using this measure, Stevenson and Gajarsky's (1992) sample of college students reported frequencies of unwanted sexual experiences that are consistent with other reports (e.g., Bradford et al., 2015; Finkelhor, 1979, 1984; Groth, 1979; Hartwick et al., 2007) demonstrating criterion validity of the questionnaire.

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Although the percentage of men reporting unwanted sexual experiences was somewhat higher than some previous estimates in Stevenson and Gajarsky's (1992) sample, it was consistent with others (e.g., Popen & Segal, 1988). A more recent study (Hartwick et al., 2007) confirmed that although women were more likely than men to report experiencing coerced kissing and fondling, no other statistically significant gender differences were found in reports of unwanted childhood sexual experiences in a sample of Canadian university students.

Providing support for the convergent validity, Rich, Wilson, and Robertson (2016) reported that recently incarcerated girls experienced greater than expected rates of unwanted sexual experiences using items derived from the questionnaire. Reports of unwanted sexual experience were also related to various aspects of alcohol and drug use in this sample.

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Exhibit

Unwanted Childhood Sexual Experiences Questionnaire

It is now generally realized that most people have sexual experiences as children and while growing up. By "sexual" it is meant any behavior or event that might seem "sexual" to you. Please try to remember the unwanted sexual experiences, that is, those that were forced on you or done against your will by an adult (someone at least five or more years older than you), while growing up. Indicate if you had any of the following experiences *before* the age of 16.

	Age(s)
1. An invitation or request to do something sexual.	___
2. Kissing and hugging in a sexual way.	___
3. An adult showing his/her sex organs to you.	___
4. You showing your sex organs to an adult.	___
5. An adult fondling you in a sexual way.	___
6. You fondling an adult in a sexual way.	___
7. An adult touching your sex organs.	___
8. You touching an adult person's sex organs.	___
9. An adult orally touching your sex organs.	___
10. You orally touching an adult person's sex organs.	___
11. Intercourse, but without attempting penetration of the vagina.	___
12. Intercourse (penile–vaginal penetration).	___
13. Anal intercourse (penile–anal penetration).	___

2 Adolescents

Adolescents' Attitudes About Sexual Relationship Rights

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Adolescents' Attitudes About Sexual Relationship Rights (SRR) is a 10-item self-report measure of adolescents' attitudes about their rights in a sexual relationship with a steady partner (Berglas, Constantine, Jerman, & Rohrbach, 2017). It includes two subscales measuring rights to refuse unwanted sexual activity (*SRR-Sex Refusal*; 5 items) and to express sexual engagement needs (*SRR-Sex Engagement*; 5 items). The SRR is intended for use with adolescents regardless of gender, race/ethnicity, relationship experience, sexual experience, and sexual orientation.

Development

The SRR was developed as part of a randomized evaluation of a rights-based sexuality education intervention for high school students in Los Angeles, California (Constantine, Jerman, Berglas, Angulo-Olaiz, Chou, & Rohrbach, 2015; Rohrbach, Berglas, Jerman, Angulo-Olaiz, Chou, & Constantine, 2015).

A review of the research literature found that existing measures were limited and not applicable for young, pre-sexually active adolescents who may not be heterosexual. Items were drafted based on existing published research, as well as formative research conducted with youth and parents (Berglas, Angulo-Olaiz, Jerman, Desai, & Constantine, 2014). Items were developed to cover the breadth of relationship situations encountered by diverse adolescents and be inclusive of gender and sexual orientation (e.g., items were written about "a person" with "their partner"). Items addressed hypothetical situations ("A person who is in a sexual relationship with . . .") rather than participant experience to account for the fact that many adolescents have not yet been involved in a sexual relationship.

The measure was validated in a sample of young adolescents living in low-income, primarily Hispanic communities in Los Angeles (Berglas et al., 2017). Two rounds of cognitive interviews were conducted to assess comprehension of items and quality of responses. A pilot administration with 9th grade students (N = 706) resulted in new and revised items. Most (90%) were 14 or 15 years old, and 51 percent were female. Seventy-three percent reported having been involved in a steady relationship, and 15 percent reported having previously had vaginal or anal sex. The final measure consisted of 17 items and was completed by 655 9th grade students prior to their participation in a school-based sexuality education intervention.

Missing response rates were low, implying acceptability and clarity of items. Respondents largely agreed with the SRR items, yielding negatively skewed item-response distributions and scale score distributions with ceiling effects.

Exploratory factor analysis with oblique (Promax) rotation identified a two-factor solution, based on eigenvalues great than 1, visual inspection of the scree plot, and rotated factor loading of .5 or greater. The two factors were reviewed and labeled as: (1) *Sex Refusal*, consisting of five items that addressed the right to refuse unwanted sexual activity; and (2) *Sex Engagement*, consisting of five items that addressed the right to express sexual engagement needs. The remaining seven items that did not load on either factor were dropped from the analysis.

Response Mode and Timing

The measure was designed for paper-and-pencil administration, but also could be implemented on a computer.

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A single stem is used for all items: "A person who is in a sexual relationship with a steady partner (like a boyfriend or girlfriend) always has the right to . . ." Participants indicate their agreement with the items on a 4-point Likert-type scale from 1 (*strongly disagree*) to 4 (*strongly agree*), with no neutral/don't know option. The scale typically takes less than five minutes to complete.

Scoring

All items are coded so that higher values indicate more positive attitudes about sexual relationship rights. No items are reverse coded. Scores for the overall 10-item scale and the two 5-item subscales are calculated as a mean scale score across the relevant items (*Sex Refusal*: items 1–5; *Sex Engagement*: items 6–10). Scale scores range from 1 to 4. Mean scores for participants in the validation sample were 3.23 (SD = .43, N = 655) for the full 10-item scale, 3.29 (SD = .52, N = 655) for the *Sex Refusal* subscale, and 3.17 (SD = .49, N = 651) for the *Sex Engagement* subscale (Berglas et al., 2017).

Reliability

Internal consistency reliability was assessed using Cronbach's coefficient alpha (Berglas et al., 2017). The full 10-item scale (α = .80), *Sex Refusal* subscale (α = .80) and *Sex Engagement* subscale (α = .79) showed acceptable reliability. Reliability values were high across gender, relationship experience, and sexual experience subgroups.

Validity

Construct validity was assessed in several ways using other survey measures completed by study participants at baseline and one-year follow-up (Berglas et al., 2017). First, SRR scores were compared by gender, relationship experience, and sexual experience subgroups. It was hypothesized that female and male adolescents would report different attitudes about their rights in sexual relationships, and that prior relationship and sexual experience also would affect responses. Mean scores on the full 10-item scale were higher for female than male students (3.26 vs. 3.19, $p < .05$), with no differences by relationship or sexual experience. However, different patterns emerged for the subscales. Attitudes about sexual refusal rights were higher for females than males (3.38 vs. 3.19, $p < .001$), whereas attitudes about sexual engagement rights were not significantly different between females and males ($p = .109$). Students with relationship experience reported more positive attitudes about sexual engagement rights (3.21 vs. 3.05, $p < .001$), but no differences in attitudes about sexual refusal rights. Sexually experienced students reported more positive attitudes about sexual engagement rights (3.28 vs. 3.25, $p = .017$), but less positive attitudes about sexual refusal rights (3.16 vs. 3.31, $p = .009$).

Convergent validity was assessed by examining correlations between the SRR and theoretically related variables, based on hypotheses that attitudes about sexual relationship rights would correlate positively with measures of comfort communicating with a steady partner about sex, history of communication with a steady partner about sex, and protection self-efficacy to assert limits and manage risk situations. The full SRR scale was positively correlated with comfort communicating with a steady partner ($r = .49$, $p < .001$) and with protection self-efficacy ($r = .27$, $p < .001$). Similar patterns were found for the subscales, with the *Sex Engagement* subscale showing stronger correlations with the communication comfort and self-efficacy scales than did the *Sex Refusal* subscale. In contrast to the full SRR scale and *Sex Refusal* subscale, the *Sex Engagement* subscale was also correlated with the partner communication measure ($r = .19$, $p < .001$).

Predictive validity was assessed with adolescents' sexual experience at one-year follow-up, using logistic regression. It was hypothesized that positive attitudes about SRR would predict sexual experience a year later. There was no significant relationship between the overall measure and sexual experience (OR = 1.03, $p = .867$). However, distinct patterns were found for the two subscales. More positive attitudes on the *Sex Refusal* subscale at pretest predicted lower odds of sexual experience at follow-up (OR = .65, $p = .011$). In contrast, more positive attitudes on the *Sex Engagement* subscale at pretest predicted greater odds of sexual experience at follow-up (OR = 1.76, $p = .003$).

Summary

The SRR is a brief, self-administered scale of adolescents' attitudes about sexual relationship rights with a steady partner. The 10-item scale and two 5-item subscales showed evidence of internal consistency reliability and construct validity within a sample of primarily Hispanic 9th grade adolescents, supporting the SRR's use in adolescent sexual health research. The SRR analyses also yielded substantive implications in finding that attitudes about rights in sexual relationships cannot be considered a single, unidimensional construct. Adolescents report distinctions between their attitudes about rights to refuse unwanted sexual activity and rights to express their sexual engagement needs. Further work will be important for conceptualizing and measuring constructs of nonsexual rights (e.g., rights to autonomy, privacy, etc.) within steady relationships, and validation of the SRR measures with other subpopulations of adolescents. A related measure is available pertaining to sexual relationship rights with a casual partner ("someone they just met") but was not part of the validation study.

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Exhibit

Adolescents' Attitudes about Sexual Relationship Rights

A person who is in a sexual relationship with a steady partner (like a boyfriend or girlfriend) always has the right to …

	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
1. …say no to sex.	○	○	○	○
2. …stop having sex with partner at any time.	○	○	○	○
3. …say no to sexual things that make them uncomfortable.	○	○	○	○
4. …refuse to have sex, without giving a reason why.	○	○	○	○
5. …stop what they're doing during sex at any time.	○	○	○	○
6. …say what they need or want.	○	○	○	○
7. …talk about what they want to do when having sex.	○	○	○	○
8. …talk about condoms or birth control.	○	○	○	○
9. …tell partner that they would like to have sex.	○	○	○	○
10. …talk about what does/doesn't feel good during sex.	○	○	○	○

Mathtech Questionnaires: Sexuality Questionnaires for Adolescents

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The Knowledge Test, the Attitude and Value Inventory, and the Behavior Inventory questionnaires have two purposes: first, to measure the most important knowledge areas, attitudes, values, skills, and behaviors that either facilitate a positive and fulfilling sexuality or reduce unintended pregnancy among adolescents; and second, to measure important possible outcomes of sexuality education programs.

The Center for Disease Control funded Mathtech, a private research firm, to develop methods of evaluating sexuality education programs. Mathtech reviewed existing questionnaires for adolescents and determined that it was necessary to develop new questionnaires. With the help of about 20 professionals in the field of adolescent sexuality and pregnancy, Mathtech identified more than 100 possible outcomes of sexuality education programs and then had 100 professionals rate (anonymously) each of those outcomes according to its importance in reducing unintended pregnancy and facilitating a positive and fulfilling sexuality.

Mathtech then calculated the mean ratings of those outcomes and developed questionnaires to measure many of the most important outcomes.

Knowledge Test

The Knowledge Test is a 34-item multiple-choice test. It includes questions in the following areas: adolescent physical development, adolescent relationships, adolescent sexual activity, adolescent pregnancy, adolescent marriage, the probability of pregnancy, birth control, and sexually transmitted disease. It has been used successfully with both junior and senior high school students.

Development

To develop the questionnaires, we completed the following steps: (a) generated between 5 and 20 items in each of the content areas that the 100 professionals indicated as important; (b) pretested the questionnaire with small groups of adolescents and adults, and clarified many items; (c) administered the questionnaire to 729 adolescents, analyzed their answers, removed items that were too easy or too difficult, and also removed items not positively related to the overall test score; (d) removed questions from content domains that had too many questions; and (e) made numerous refinements following subsequent administrations of the questionnaires and reviews by other professionals.

Response Mode and Timing

Respondents circle the single best answer to each question. It typically takes between 15 and 45 minutes to complete the questionnaire.

Scoring

The answers to the test are included in Table 1. To obtain the percentage correct, count the number of correct answers and divide by 34. No special provisions are made for students who do not answer questions.

TABLE 1
Answers to the Knowledge Test

Question	Answer	Question	Answer	Question	Answer
1	b	12	e	23	a
2	b	13	a	24	d
3	d	14	c	25	c
4	e	15	d	26	e
5	d	16	e	27	a
6	a	17	d	28	b
7	a	18	d	29	b
8	e	19	a	30	e
9	e	20	b	31	e
10	a	21	a	32	d
11	c	22	e	33	e
				34	c

Reliability

The test was administered to 58 adolescents on one occasion, and then again 2 weeks later. The test–retest reliability coefficient was .89.

Validity

Older students obtained higher scores than younger students; and students with overall higher grade-point averages had higher scores than students with lower grade point averages. Content validity was determined by experts who selected both the domains and the items for the domains.

Attitude and Value Inventory

The Attitude and Value Inventory includes 14 different scales.

Development

To develop the questionnaires, we completed the following steps: (a) generated 5 to 10 items for each of the psychological outcomes rated important by the 100 experts; (b) had the items reviewed by small groups of both adults and adolescents who made suggestions for changes; (c) had two psychologists trained in questionnaire design and scale construction examine each item for unidimensionality and clarity; and (d) had more than 200 adolescents complete the questionnaire, removing those items that had a correlation coefficient greater than .30 with the Crowne and Marlowe (1964) Social Desirability Scale, that had the lowest scale loadings on each scale, and that had mean scores near the minimum or maximum possible score.

Response Mode and Timing

Each scale uses a 5-point Likert-type response. The responses are *strongly disagree, disagree, neutral, agree, strongly agree*. Respondents should select the number indicating their agreement/disagreement with each item. Response times range between 10 and 30 minutes.

Scoring

See Table 2 for scoring of the Attitude and Value Inventory, with the items grouped by scale. In front of each item is a plus sign or minus sign indicating whether the item should be positively scored or reverse scored. The mean score for each scale should be determined by adding the responses and dividing by 5. Higher scores represent more favorable attitudes.

Reliability

Reliability was determined by administering the questionnaire to 990 students and calculating Cronbach's alpha. Reliability for each scale is as follows: *Clarity of Long Term Goals* ($\alpha = .89$), *Clarity of Personal Sexual Values* ($\alpha = .73$), *Understanding of Emotional Needs* ($\alpha = .81$), *Understanding*

TABLE 2
Scoring for the Attitude and Value Inventory

Clarity of Long-Term Goals	–Q10, +Q23, +Q30, +Q37, +Q51
Clarity of Personal Sexual Values	–Q5, –Q13, –Q25, +Q49, +70
Understanding of Emotional Needs	+Q14, +Q17, +Q48, +Q56, –Q62
Understanding of Personal Social Behavior	–Q6, +Q19, +Q27, –Q34, +Q66
Understanding of Personal Sexual Responses	–Q21, +Q31, +Q36, –Q45, –Q52
Attitude Toward Various Gender Role Behaviors	–Q8, –Q28, +Q41, +Q50, +Q65
Attitude Toward Sexuality in Life	–Q12, –Q42, +Q55, –Q58, +64
Attitude Toward the Importance of Birth Control	+Q4, –Q16, +Q40, –Q59, +Q61
Attitude Toward Premarital Intercourse	+Q2, +Q20, –Q22, +Q29, –Q63
Attitude Toward the Use of Pressure and Force in Sexual Activity	–Q9, +Q15, –Q46, +Q47, +Q54
Recognition of the Importance of the Family	–Q11, –Q24, +Q53, –Q60, +Q69
Self-Esteem	+Q3, –Q26, –Q35, +Q44, –Q68
Satisfaction with Personal Sexuality	–Q7, –Q18, +Q33, –Q39, +Q57
Satisfaction with Social Relationships	+Q1, –Q32, –Q38, –Q43, +Q67

of Personal Social Behavior (α = .78), *Understanding of Personal Sexual Response* (α = .80), *Attitude Toward Gender Roles* (α = .66), *Attitude Toward Sexuality in Life* (α = .75), *Attitude Toward the Importance of Birth Control* (α = .72), *Attitude toward Premarital Sex* (α = .94), *Attitude Toward the Use of Force and Pressure in Sexual Activity* (α = .58), *Recognition of the Importance of the Family* (α = .70), *Self Esteem* (α = .73), *Satisfaction with Personal Sexuality* (α = .85), *Satisfaction with Social Relationships* (α = .81).

Behavior Inventory

Many behaviors have at least three important components or aspects to them: the skill with which the behavior is completed, the comfort experienced during that behavior, and the frequency of that behavior. The Behavior Inventory measures these three aspects of several kinds of behavior.

It is important to realize that the questions measuring skill do not try to assess skill in the classroom but, instead, measure the frequency with which respondents actually use important skills in everyday life.

Development

The panel of 100 experts rated *most highly* most of the skills, areas of comfort, and behaviors for which we developed measures. We tried many different ways of measuring skills and after a variety of attempts and pretests with small groups of adolescents, we settled on the current approach in which we identified key behaviors in various skills and simply asked what proportion of the time respondents engage in those behaviors.

The scales measuring comfort and behaviors flowed directly from the outcomes specified by the experts. We conducted minitests with both adults and adolescents to determine for how many months they could accurately measure their communication and sexual behavior. Nearly all adolescents could remember their behavior for the previous month.

The entire inventory was reviewed by psychologists who examined each item for clarity, unidimensionality, and comprehensibility. More than 100 adolescents completed the questionnaire; their responses indicated that most data were reliable.

Because of the great sensitivity of these questions, the researcher should (a) get appropriate approval to administer the questionnaire, (b) emphasize to the students that completing the questionnaire is voluntary, and (c) take every reasonable measure to assure that the answers remain absolutely anonymous to protect participant privacy.

Response Mode and Timing

Respondents should select the number indicating their agreement/disagreement with each item. The questionnaire takes adolescents between 20 and 45 minutes to complete.

The questions measuring skills use 5-point scales with answers ranging from *almost always* to *almost never*; those measuring comfort use 4-point scales ranging from *comfortable* to *very uncomfortable*; those measuring sexual activity, use of birth control, and frequency of communication ask how many times during the previous month the respondent engaged in the specified activity.

Scoring

See Table 3 for scoring information. Most of the questions measuring skills or comfort should be combined into scales. In front of each item measuring a skill or area of comfort is a plus sign or minus sign, indicating whether the item should be positively scored or reverse scored. The mean score for these scales should be determined by adding the responses and dividing by the number of items. Higher scores represent more favorable attitudes.

The questions measuring the existence and frequency of sexual behavior should not be combined into scales. Moreover, higher scores do not commonly represent more favorable behaviors.

Reliability

For all items test–retest reliability was determined by administering the questionnaire twice, 2 weeks apart. However, because some students were not sexually active,

TABLE 3
Scoring for the Behavior Inventory

Social Decision-Making Skills	Comfort Talking with Friends, Girl/Boyfriend, and Parents About Birth Control
+Q1	–Q32
–Q2	–Q33
+Q3	–Q34
+Q4	
+Q5	
+Q6	
Sexual Decision-Making Skills	Comfort Talking with Parents About Sex and Birth Control
+Q7	–Q31
–Q8	–Q34
+Q9	
+Q10	
–Q11	
Communication Skills	Comfort Expressing Concern and Caring
+Q12	–Q35
+Q13	
+Q14	
+Q15	
+Q16	
+Q17	
+Q18	
+Q19	
Assertiveness Skills	Comfort Being Sexually Assertive (Saying "No")
+Q20	–Q36
+Q21	–Q37
+Q22	
Birth Control Assertiveness Skills	Comfort Having Current Sex Life, Whatever it may be
+Q23	–Q38
+Q24	
Comfort Engaging in Social Activities	Comfort Getting and Using Birth Control
–Q25	–Q39
–Q26	–Q40
–Q27	–Q41
–Q28	–Q42
Comfort Talking with Friends, Girl/Boyfriend, and Parents About Sex	
Q29	
Q30	
Q31	

the sample sizes are unreasonably low for some items. Moreover, the test–retest reliability coefficients are artificially low for some items because the sexual activities of teenagers change from one 2-week period to the next. Consequently, Cronbach's alpha is also given for those scales having two or more items. All of these coefficients are presented in Tables 4 and 5.

TABLE 4
Reliability Coefficients for the Scales in the Behavior Inventory

Test–retest r[a]	n	α[b]	n	Scale
.84	39	.58	541	Social Decision-Making Skills
.65	36	.61	464	Sexual Decision-Making Skills
.57	41	.75	529	Communication Skills
.68	32	.62	409	Assertiveness Skills
.88	17	.58	243	Birth Control Assertiveness Skills
.69	40	.81	517	Comfort Engaging in Social Activities
.66	36	.66	461	Comfort Talking with Friends, Girl/Boyfriend, and Parents About Sex
.40	33	.63	133	Comfort Talking with Friends, Girl/Boyfriend, and Parents About Birth Control
.62	39	.73	156	Comfort Talking with Parents About Sex and Birth Control
.44	41	N/A	N/A	Comfort Expressing Concern and Caring
.68	35	.68	455	Comfort Being Sexually Assertive (Saying "No")
.70	37	N/A	N/A	Comfort Having Current Sex Life, Whatever it may be
.38	14	.86	449	Comfort Getting and Using Birth Control

Note. N/A means not applicable because alpha requires two or more items, and these scales had only one item.
aThe test–retest coefficient is the correlation coefficient based upon two administrations of the same questionnaire 2 weeks apart.
bAlpha is Cronbach's alpha based upon all the intercorrelations within each scale.

TABLE 5
Test–Retest Reliability Coefficients for the Behavior Questions in the Behavior Inventory

r[a]		Question
1.00	Q43	Ever had sexual intercourse
.78	Q44	Had intercourse last month
.88	Q45	Frequency of intercourse last month
.97	Q46	Frequency of intercourse last month with no birth control
.89	Q47	Frequency of intercourse last month using diaphragm, withdrawal, rhythm, or foam (without condoms)
.97	Q48	Frequency of intercourse last month using pill, condoms, or IUD
.80	Q49	Frequency of conversations with parents about sex last month
.81	Q50	Frequency of conversations with friends about sex last month
.83	Q51	Frequency of conversations with boy/girlfriend about sex last month
.71	Q52	Frequency of conversations with parents about birth control last month
.69	Q53	Frequency of conversations with friends about birth control last month
.75	Q54	Frequency of conversations with boy/girlfriend about birth control last month

Note. $N = 41$.
aThe measure of reliability is the correlation coefficient between the two administrations of the questionnaire given 2 weeks apart.

Other Information

These questionnaires are in the public domain and can be used without permission. However, appropriate citation is requested. They are included in Kirby (1984).

References

Crowne, D. P., & Marlowe, D. (1964). *The approval motive: Studies in evaluative dependence*. New York: Wiley.

Kirby, D. (1984). *Sexuality education: An evaluation of programs and their effects*. Santa Cruz, CA: Network Publications.

Exhibit

Mathtech Questionnaires: Sexuality Questionnaires for Adolescents

We are trying to find out if this program is successful. You can help us by completing this questionnaire. To keep your answers confidential and private, do *not* put your name anywhere on this questionnaire. Please use a regular pen or pencil so that all questionnaires will look about the same and no one will know which is yours. Because this study is important, your answers are also important. Please answer each question carefully. Thank you for your help.

Name of school or organization where course was taken

_____

Teacher's name

_____

Your birth date: Month Day Year

_____

Your sex

○ Male
○ Female

Your grade level in school

○ a. 9
○ b. 10
○ c. 11
○ d. 12

Please select the one best answer to each of the questions below.

1. By the time teenagers graduate from high schools in the United States:

   ○ a. only a few have had sex (sexual intercourse)
   ○ b. about half have had sex
   ○ c. about 80% have had sex

2. During their menstrual periods, girls:

   ○ a. are too weak to participate in sports or exercise
   ○ b. have a normal, monthly release of blood from the uterus
   ○ c. cannot possibly become pregnant
   ○ d. should not shower or bathe
   ○ e. all of the above

3. It is harmful for a woman to have sex (sexual intercourse) when she

   ○ a. is pregnant
   ○ b. is menstruating
   ○ c. has a cold

- ○ d. has a sexual partner with syphilis
- ○ e. none of the above

4. Some contraceptives

   - ○ a. can be obtained only with a doctor's prescription
   - ○ b. are available at family planning clinics
   - ○ c. can be bought over the counter at drug stores
   - ○ d. can be obtained by people under 18 without their parents' permission
   - ○ e. all of the above

5. If 10 couples have sexual intercourse regularly without using any kind of birth control, the number of couples who become pregnant by the end of 1 year is about:

   - ○ a. one
   - ○ b. three
   - ○ c. six
   - ○ d. nine
   - ○ e. none of the above

6. When unmarried teenage girls learn they are pregnant, the largest group of them decide:

   - ○ a. to have an abortion
   - ○ b. to put the child up for adoption
   - ○ c. to raise the child at home
   - ○ d. to marry and raise the child with the husband
   - ○ e. none of the above

7. People having sexual intercourse can best prevent getting a sexually transmitted disease (VD or STD) by using:

   - ○ a. condoms (rubbers)
   - ○ b. contraceptive foam
   - ○ c. the pill
   - ○ d. withdrawal (pulling out)

8. When boys go through puberty:

   - ○ a. they lose their "baby fat" and become slimmer
   - ○ b. their penises become larger
   - ○ c. they produce sperm
   - ○ d. their voices become lower
   - ○ e. all of the above

9. Married teenagers:

   - ○ a. have the same social lives as their unmarried friends
   - ○ b. avoid pressure from friends and family
   - ○ c. still fit in easily with their old friends
   - ○ d. usually support themselves without help from their parents
   - ○ e. none of the above

10. If a couple has sexual intercourse and uses no birth control, the woman might get pregnant:

    - ○ a. anytime during the month
    - ○ b. only 1 week before menstruation begins
    - ○ c. only during menstruation
    - ○ d. only 1 week after menstruation begins
    - ○ e. only 2 weeks after menstruation begins

11. The method of birth control which is *least* effective is:

    - ○ a. a condom with foam
    - ○ b. the diaphragm with spermicidal jelly
    - ○ c. withdrawal (pulling out)
    - ○ d. the pill
    - ○ e. abstinence (not having intercourse)

12. It is possible for a woman to become pregnant:

    ○ a. the first time she has sex (sexual intercourse)
    ○ b. if she has sexual intercourse during her menstrual period
    ○ c. if she has sexual intercourse standing up
    ○ d. if sperm get near the opening of the vagina, even though the man's penis does not enter her body
    ○ e. all of the above

13. Physically:

    ○ a. girls usually mature earlier than boys
    ○ b. most boys mature earlier than most girls
    ○ c. all boys and girls are fully mature by age 16
    ○ d. all boys and girls are fully mature by age 18

14. It is impossible now to cure:

    ○ a. syphilis
    ○ b. gonorrhea
    ○ c. herpes virus # 2
    ○ d. vaginitis
    ○ e. all of the above

15. When men and women are physically mature:

    ○ a. each female ovary releases two eggs each month
    ○ b. each female ovary releases millions of eggs each month
    ○ c. male testes produce one sperm for each ejaculation (climax)
    ○ d. male testes produce millions of sperm for each ejaculation (climax)
    ○ e. none of the above

16. Teenagers who choose to have sexual intercourse may possibly:

    ○ a. have to deal with a pregnancy
    ○ b. feel guilty
    ○ c. become more close to their sexual partners
    ○ d. become less close to their sexual partners
    ○ e. all of the above

17. As they enter puberty, teenagers become more interested in sexual activities because:

    ○ a. their sex hormones are changing
    ○ b. the media (TV, movies, magazines, records) push sex for teenagers
    ○ c. some of their friends have sex and expect them to have sex also
    ○ d. all of the above

18. To use a condom the correct way, a person must:

    ○ a. leave some space at the tip for the guy's fluid
    ○ b. use a new one every time sexual intercourse occurs
    ○ c. hold it on the penis while pulling out of the vagina
    ○ d. all of the above

19. The proportion of American girls who become pregnant before turning 20 is:

    ○ a. 1 out of 3
    ○ b. 1 out of 11
    ○ c. 1 out of 43
    ○ d. 1 out of 90

20. In general, children born to young teenage parents:

    ○ a. have few problems because their parents are emotionally mature
    ○ b. have a greater chance of being abused by their parents

- ○ c. have normal birth weight
- ○ d. have a greater chance of being healthy
- ○ e. none of the above

21. Treatment for venereal disease is best if:

- ○ a. both partners are treated at the same time
- ○ b. only the partner with the symptoms sees a doctor
- ○ c. the person takes the medicine only until the symptoms disappear
- ○ d. the partners continue having sex (sexual intercourse)
- ○ e. all of the above

22. Most teenagers:

- ○ a. have crushes or infatuations that last a short time
- ○ b. feel shy or awkward when first dating
- ○ c. feel jealous sometimes
- ○ d. worry a lot about their looks
- ○ e. all of the above

23. Most unmarried girls who have children while still in high school:

- ○ a. depend upon their parents for support
- ○ b. finish high school and graduate with their class
- ○ c. never have to be on public welfare
- ○ d. have the same social lives as their peers
- ○ e. all of the above

24. Syphilis:

- ○ a. is one of the most dangerous of the venereal diseases
- ○ b. is known to cause blindness, insanity, and death if untreated
- ○ c. is first detected as a chancre sore on the genitals
- ○ d. all of the above

25. For a boy, nocturnal emissions (wet dreams) means he:

- ○ a. has a sexual illness
- ○ b. is fully mature physically
- ○ c. is experiencing a normal part of growing up
- ○ d. is different from most other boys

26. If people have sexual intercourse, the advantage of using condoms is that they:

- ○ a. help prevent getting or giving VD
- ○ b. can be bought in drug stores by either sex
- ○ c. do not have dangerous side effects
- ○ d. do not require a prescription
- ○ e. all of the above

27. If two people want to have a close relationship, it is important that they:

- ○ a. trust each other and are honest and open with each other
- ○ b. date other people
- ○ c. always think of the other person first
- ○ d. always think of their own needs first
- ○ e. all of the above

28. The physical changes of puberty:

- ○ a. happen in a week or two
- ○ b. happen to different teenagers at different ages
- ○ c. happen quickly for girls and slowly for boys
- ○ d. happen quickly for boys and slowly for girls

29. For most teenagers, their emotions (feelings):

- ○ a. are pretty stable
- ○ b. seem to change frequently
- ○ c. don't concern them very much
- ○ d. are easy to put into words
- ○ e. are ruled by their thinking

30. Teenagers who marry, compared to those who do not:

- ○ a. are equally likely to finish high school
- ○ b. are equally likely to have children
- ○ c. are equally likely to get divorced
- ○ d. are equally likely to have successful work careers
- ○ e. none of the above

31. The rhythm method (natural family planning):

- ○ a. means couples cannot have intercourse during certain days of the woman's menstrual cycle
- ○ b. requires the woman to keep a record of when she has her period
- ○ c. is effective less than 80% of the time
- ○ d. is recommended by the Catholic church
- ○ e. all of the above

32. The pill:

- ○ a. can be used by any woman
- ○ b. is a good birth control method for women who smoke
- ○ c. usually makes menstrual cramping worse
- ○ d. must be taken for 21 or 28 days in order to be effective
- ○ e. all of the above

33. Gonorrhea:

- ○ a. is 10 times more common than syphilis
- ○ b. is a disease that can be passed from mothers to their children during birth
- ○ c. makes many men and women sterile (unable to have babies)
- ○ d. is often difficult to detect in women
- ○ e. all of the above

34. People choosing a birth control method:

- ○ a. should think only about the cost of the method
- ○ b. should choose whatever method their friends are using
- ○ c. should learn about all the methods before choosing the one that's best for them
- ○ d. should get the method that's easiest to get
- ○ e. all of the above

The questions below are not a test of how much you know. We are interested in what you believe about some important issues. Please rate each statement according to how much you agree or disagree with it. Everyone will have different answers. Your answer is correct if it describes you very well.

	1 Strongly Disagree	2 Somewhat Disagree	3 Neutral	4 Somewhat Agree	5 Strongly Agree
1. I am very happy with my friendships.	○	○	○	○	○
2. Unmarried people should not have sex (sexual intercourse).	○	○	○	○	○
3. Overall, I am satisfied with myself.	○	○	○	○	○
4. Two people having sex should use some form of birth control if they aren't ready for a child.	○	○	○	○	○

5. I'm confused about my personal sexual values and beliefs.	○	○	○	○	○
6. I often find myself acting in ways I don't understand.	○	○	○	○	○
7. I am not happy with my sex life.	○	○	○	○	○
8. Men should not hold jobs traditionally held by women.	○	○	○	○	○
9. People should never take "no" for an answer when they want to have sex.	○	○	○	○	○
10. I don't know what I want out of life.	○	○	○	○	○
11. Families do very little for their children.	○	○	○	○	○
12. Sexual relationships create more problems than they're worth.	○	○	○	○	○
13. I'm confused about what I should and should not do sexually.	○	○	○	○	○
14. I know what I want and need emotionally.	○	○	○	○	○
15. No one should pressure another person into sexual activity.	○	○	○	○	○
16. Birth control is not very important.	○	○	○	○	○
17. I know what I need to be happy.	○	○	○	○	○
18. I am not satisfied with my sexual behavior (sex life).	○	○	○	○	○
19. I usually understand the way I act.	○	○	○	○	○
20. People should not have sex before marriage.	○	○	○	○	○
21. I do not know much about my own physical and emotional sexual responses.	○	○	○	○	○
22. It is all right for two people to have sex before marriage if they are in love.	○	○	○	○	○
23. I have a good idea of where I'm headed in the future.	○	○	○	○	○
24. Family relationships are not important.	○	○	○	○	○
25. I have trouble knowing what my beliefs and values are about my personal sexual behavior.	○	○	○	○	○
26. I feel I do not have much to be proud of.	○	○	○	○	○
27. I understand how I behave around others.	○	○	○	○	○
28. Women should behave differently from men most of the time.	○	○	○	○	○
29. People should have sex only if they are married.	○	○	○	○	○
30. I know what I want out of life.	○	○	○	○	○
31. I have a good understanding of my own personal feelings and reactions.	○	○	○	○	○
32. I don't have enough friends.	○	○	○	○	○
33. I'm happy with my sexual behavior now.	○	○	○	○	○
34. I don't understand why I behave with my friends as I do.	○	○	○	○	○
35. At times I think I'm no good at all.	○	○	○	○	○
36. I know how I react in different sexual situations.	○	○	○	○	○
37. I have a clear picture of what I'd like to be doing in the future.	○	○	○	○	○
38. My friendships are not as good as I would like them to be.	○	○	○	○	○
39. Sexually, I feel like a failure.	○	○	○	○	○
40. More people should be aware of the importance of birth control.	○	○	○	○	○
41. At work and at home, women should not have to behave differently from men, when they are equally capable.	○	○	○	○	○
42. Sexual relationships make life too difficult.	○	○	○	○	○
43. I wish my friendships were better.	○	○	○	○	○
44. I feel that I have many good personal qualities.	○	○	○	○	○
45. I am confused about my reactions in sexual situations.	○	○	○	○	○
46. It is all right to pressure someone into sexual activity.	○	○	○	○	○
47. People should not pressure others to have sex with them.	○	○	○	○	○
48. Most of the time my emotional feelings are clear to me.	○	○	○	○	○
49. I have my own set of rules to guide my sexual behavior (sex life).	○	○	○	○	○
50. Women and men should be able to have the same jobs, when they are equally capable.	○	○	○	○	○

51.	I don't know what my long-range goals are.	○	○	○	○	○
52.	When I'm in a sexual situation, I get confused about my feelings.	○	○	○	○	○
53.	Families are very important.	○	○	○	○	○
54.	It is all right to demand sex from a girlfriend or boyfriend.	○	○	○	○	○
55.	A sexual relationship is one of the best things a person can have.	○	○	○	○	○
56.	Most of the time I have a clear understanding of my feelings and emotions.	○	○	○	○	○
57.	I am very satisfied with my sexual activities just the way they are.	○	○	○	○	○
58.	Sexual relationships only bring trouble to people.	○	○	○	○	○
59.	Birth control is not as important as some people say.	○	○	○	○	○
60.	Family relationships cause more trouble than they're worth.	○	○	○	○	○
61.	If two people have sex and aren't ready to have a child, it is very important they use birth control.	○	○	○	○	○
62.	I'm confused about what I need emotionally.	○	○	○	○	○
63.	It is all right for two people to have sex before marriage.	○	○	○	○	○
64.	Sexual relationships provide an important and fulfilling part of life.	○	○	○	○	○
65.	People should be expected to behave in certain ways just because they are male or female.	○	○	○	○	○
66.	Most of the time I know why I behave the way I do.	○	○	○	○	○
67.	I feel good having as many friends as I have.	○	○	○	○	○
68.	I wish I had more respect for myself.	○	○	○	○	○
69.	Family relationships can be very valuable.	○	○	○	○	○
70.	I know for sure what is right and wrong sexually for me.	○	○	○	○	○

The questions below ask how often you have done some things. Some of the questions are personal and ask about your social life and sex life. Some questions will not apply to you. Please do not conclude from the questions that you should have had all of the experiences the questions ask about. Instead, just mark whatever answer describes you best.

	Almost never (about 5% of the time or less)	Sometimes (about 25% of the time)	Half the time (about 50% of the time)	Usually (about 75% of the time)	Almost always (about 95% of the time)	Does not apply to me
1. When things you've done turn out poorly, how often do you take responsibility for your behavior and its consequences?	○	○	○	○	○	○
2. When things you've done turn out poorly, how often do you blame others?	○	○	○	○	○	○
3. When you are faced with a decision, how often do you take responsibility for making a decision about it?	○	○	○	○	○	○
4. When you have to make a decision, how often do you think hard about the consequences of each possible choice?	○	○	○	○	○	○
5. When you have to make a decision, how often do you get as much information as you can before making the decision?	○	○	○	○	○	○

6. When you have to make a decision, how often do you first discuss it with others?	○	○	○	○	○	○
7. When you have to make a decision about your sexual behavior (for example, going out on a date, holding hands, kissing, petting, or having sex), how often do you take responsibility for the consequences?	○	○	○	○	○	○
8. When you have to make a decision about your sexual behavior, how often do you think hard about the consequences of each possible choice?	○	○	○	○	○	○
9. When you have to make a decision about your sexual behavior, how often do you first get as much information as you can?	○	○	○	○	○	○
10. When you have to make a decision about your sexual behavior, how often do you first discuss it with others?	○	○	○	○	○	○
11. When you have to make a decision about your sexual behavior, how often do you make it on the spot without worrying about the consequences?	○	○	○	○	○	○
12. When a friend wants to talk with you, how often are you able to clear your mind and really listen to what your friend has to say?	○	○	○	○	○	○
13. When a friend is talking with you, how often do you ask questions if you don't understand what your friend in saying?	○	○	○	○	○	○
14. When a friend is talking with you, how often do you nod your head and say "yes" or something else to show that you are interested?	○	○	○	○	○	○
15. When you want to talk with a friend, how often are you able to get your friend to really listen to you?	○	○	○	○	○	○
16. When you talk with a friend, how often do you ask for your friend's reaction to what you've said?	○	○	○	○	○	○

17. When you talk with a friend, how often do you let your feelings show?	○	○	○	○	○	○
18. When you are with a friend you care about, how often do you let that friend know you care?	○	○	○	○	○	○
19. When you talk with a friend, how often do you include statements like "my feelings are …," "the way I think is …," or "it seems to me"?	○	○	○	○	○	○
20. When you are alone with a date or boy/girlfriend, how often can you tell him/her your feelings about what you want to do and do not want to do sexually? (If you are a boy, boy/girlfriend means girlfriend; if you are a girl, it means boyfriend.)	○	○	○	○	○	○
21. If a boy/girl puts pressure on you to be involved sexually and you don't want to be involved, how often do you say "no"? (If you are a boy, boy/girl means girl; if you are a girl, it means boy.)	○	○	○	○	○	○
22. If a boy/girl puts pressure on you to be involved sexually and you don't want to be involved, how often do you succeed in stopping it?	○	○	○	○	○	○
23. If you have sexual intercourse with your boy/girlfriend, how often can you talk with him/her about birth control?	○	○	○	○	○	○
24. If you have sexual intercourse and want to use birth control, how often do you insist on using birth control?	○	○	○	○	○	○

In this section, we want to know how uncomfortable you are doing different things. Being "uncomfortable" means that it is difficult for you and it makes you nervous and uptight. For each item, select the response that describes you best, but if the item doesn't apply to you, select "Does not Apply to Me."

	1 Comfortable	2 A little Uncomfortable	3 Somewhat Uncomfortable	4 Very Uncomfortable	Does not Apply to Me
25. Getting together with a group of friends of the opposite sex.	○	○	○	○	○
26. Going to a party.	○	○	○	○	○
27. Talking with teenagers of the opposite sex.	○	○	○	○	○
28. Going out on a date.	○	○	○	○	○
29. Talking with friends about sex.	○	○	○	○	○

30. Talking with a date or boy/girlfriend about sex. (If you are a boy, boy/girlfriend means girlfriend; if you are a girl, it means boyfriend.)	○	○	○	○	○
31. Talking with parents about sex.	○	○	○	○	○
32. Talking with friends about birth control.	○	○	○	○	○
33. Talking with a date or boy/girlfriend about birth control. (If you are a boy, boy/girlfriend means girlfriend; if you are a girl, it means boyfriend.)	○	○	○	○	○
34. Talking with parents about birth control.	○	○	○	○	○
35. Expressing concern and caring for others.	○	○	○	○	○
36. Telling a date or boy/girlfriend what you want to do and do not want to do sexually.	○	○	○	○	○
37. Saying "no" to a sexual come-on.	○	○	○	○	○
38. Having your current sex life, whatever it may be (it may be doing nothing, kissing, petting, or having intercourse).	○	○	○	○	○

If you are not having sexual intercourse, select "Does not Apply to Me" in the four questions below.

	1 Comfortable	2 A little Uncomfortable	3 Somewhat Uncomfortable	4 Very Uncomfortable	Does not apply to me
39. Insisting on using some form of birth control, if you are having sex.	○	○	○	○	○
40. Buying contraceptives at a drug store, if you are having sex.	○	○	○	○	○
41. Going to a doctor or clinic for contraception, if you are having sex.	○	○	○	○	○
42. Using some form of birth control, if you are having sex.	○	○	○	○	○

Select the correct answer to the following two questions.

	Yes	No
43. Have you ever had sex (sexual intercourse)?	○	○
44. Have you had sex (sexual intercourse) during the last month?	○	○

The following questions ask how many times you did some things during the last month. Put a number in the right-hand space to show the number of times you engaged in that activity. If you did not do that during the last month, put a "0" in the space. Think *carefully* about the times that you have had sex during the last month. Think also about the number of times you did not use birth control and the number of times you used different types of birth control.

	Times in the last month
45. Last month, how many times did you have sex (sexual intercourse)?	___
46. Last month, how many times did you have sex when you or your partner did not use any form of birth control?	___
47. Last month, how many times did you have sex when you or your partner used a diaphragm, withdrawal (pulling out before releasing fluid), rhythm (not having sex on fertile days), or foam without condoms?	___
48. Last month, how many times did you have sex when you or your partner used the pill, condoms (rubbers), or an IUD?	___

If you add your answer to questions #46, #47, and #48, the total number should equal your answer to #45. (If it does not, please correct your answers.)

	Times in the last month
49. During the last month, how many times have you had a conversation or discussion about sex with your parents?	___
50. During the last month, how many times have you had a conversation or discussion about sex with your friends?	___
51. During the last month, how many times have you had a conversation or discussion about sex with a date or boy/girlfriend? (If you are a boy, boy/girlfriend means girlfriend; if you are a girl, it means boyfriend.)	___
52. During the last month, how many times have you had a conversation or discussion about birth control with your parents?	___
53. During the last month, how many times have you had a conversation or discussion about birth control with your friends?	___
54. During the last month, how many times have you had a conversation or discussion about birth control with a date or boy/girlfriend?	___

Sexual Socialization Instrument

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The Sexual Socialization Instrument (SSI) measures permissive sexual influences of parents and peers on adolescents and young adults. The term *permissive* here means acceptance of nonmarital sexual interactions. A permissive influence is one that would encourage sexual involvement in a wide variety of relationships—from casual to long term. A nonpermissive influence is one that discourages casual sexual encounters and promotes either abstinence or sex for individuals only in loving, long-term relationships.

Development

The SSI was developed for use in a longitudinal study investigating the relationships among background variables,

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residential and social affiliations, and the attitudes, values, and sexual experiences of university students. The items of this instrument were included in a questionnaire completed by 557 first-year students (48% female) in 1987 and 303 of these same students (55% female) in 1991 when they were seniors.

The SSI consists of two subscales, the *Parental Sexual Socialization Scale* and the *Peer Sexual Socialization Scale*. When the SSI was given to first-year students, short forms of the parental and peer scales containing four items (numbered 1, 3, 19 and 20) and six items (numbered 2, 4, 5, 8, 15, and 18), respectively, were used. To improve the internal consistency reliability of both scales for the second administration of the questionnaire to seniors, the number of items in the parental and peer scales was increased to eight (numbered 1, 3, 6, 9, 12, 16, 19, and 20) and 12 (numbered 2, 4, 5, 7, 8, 10, 11, 13, 14, 15, 17, and 18), respectively. These versions of the scales are referred to as long forms.

If one is interested in an overall measure of sexual socialization from parents and peers, the items of the parental and peer scales can be combined to form such a measure as was done by Bell et al. (1992), Bell, Lottes, and Kuriloff (1995), and Kuriloff, Lottes, and Bell (1995).

Response Mode and Timing

Responses to each item are given on a 5-point Likert-type scale: 1 (*strongly agree*), 2 (*agree*), 3 (*undecided*), 4 (*disagree*), and 5 (*strongly disagree*). Respondents indicate the number from 1 to 5 corresponding to their degree of agreement/disagreement with each item. The instrument requires about 5 minutes to complete.

Scoring

Eleven of the 20 items are scored in the reverse direction: Items 1, 4, 6, 8, 11, 13, 14, 15, 16, 18, and 19. For reverse-scored items, recoding needs to transform all scores of 5 to a score of 1, all scores of 4 to 2, etc., before responses to the items are summed to give a scale score. For the long form of the *Parental Sexual Socialization Scale*, scores can range from 8 to 40, and for the short form of this scale, scores can range from 4 to 20. For the long form of the *Peer Sexual Socialization Scale*, scores can range from 12 to 60, and for the short form of this scale, scores can range from 6 to 30. The higher the score, the more permissive the parental or peer influence for respondents.

Reliability

In a sample of 557 first-year college students (Lottes & Kuriloff, 1994), Cronbach's alphas for the short forms of the *Parental* and *Peer Sexual Socialization Scales* were both .60. Test–retest reliabilities comparing first-year students with seniors for a sample of 303 college students were .55 and .47, respectively. In this sample of 303 seniors, Cronbach's alphas for the short forms of the *Parental* and *Peer* scales were .73 and .70, respectively, and alphas for the long forms of these scales were .78 and .85, respectively (Lottes & Kuriloff, 1994). Wernersbach (2013) found a low Cronbach's alpha of .41 for the parenting scale (researchers attributed this to a floor effect), and a high alpha for the peer scale (.87) with a sample of U.S. university students.

Validity

The construct validity of the *Parental* and *Peer Sexual Socialization Scales* was supported by statistically significant results for predicted correlations and group differences. As expected, Lottes and Kuriloff (1994) found that men reported significantly higher scores on both the short and long forms of the parental and peer scales. Also, as expected, future fraternity members as first-year students reported significantly higher scores on the short form of the *Peer Socialization Scale* than did first-year male students who remained independent. Similarly, compared to nonfraternity senior men, senior fraternity men reported significantly higher scores on the long form of the *Peer Sexual Socialization Scale* (Lottes & Kuriloff, 1994). In addition, the short forms of the *Parental* and *Peer Sexualization Scales* were found to be positively significantly correlated with number of sex partners and negatively significantly correlated with age of first intercourse.

CFA supported the 12-item single-factor solution of the *Peer Sexual Socialization Scale* (Westerlund, Santtila, Johansson, Jern, & Sandnabba, 2012) using a large sample of Finnish individuals. This study also showed that for the most part, the scale was invariant across men and women, except for two items (i.e., "My friends suggest dates to each other who are known to be sexually easy," and "Among my friends, women who have the most sexual experience are the most highly regarded.") Researchers can remove these two items and proceed with a 10-item solution, and retain strong model fit (see Westerlund et al., 2012). Using this modified version, Westerlund et al. (2012) found that men had less restricted peer-group sexual attitudes than women.

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Exhibit

Sexual Socialization Instrument

Below you will see five numbers corresponding to five choices. Choose the response that best describes your degree of agreement/disagreement with each statement. Write or shade in only one response for each statement. Because all responses will remain anonymous you can respond truthfully with no concerns about anyone connecting responses with individuals.

	1 Strongly Agree	2 Agree	3 Undecided	4 Disagree	5 Strongly Disagree
1. My mother would have felt okay about my having sex with many different people.	○	○	○	○	○
2. I am uncomfortable around people who spend much of their time talking about their sexual experiences.	○	○	○	○	○
3. My father would have felt upset if he'd thought I was having sex with many different people.	○	○	○	○	○
4. Among my friends, men who have the most sexual experience are the most highly regarded.	○	○	○	○	○
5. My friends disapprove of being involved with someone who was known to be sexually easy.	○	○	○	○	○
6. According to my parents, having sexual intercourse is an important part of my becoming an adult.	○	○	○	○	○
7. Most of my friends don't approve of having multiple sexual partners.	○	○	○	○	○
8. My friends and I enjoy telling each other about our sexual experiences.	○	○	○	○	○
9. My parents stress that sex and intimacy should always be linked.	○	○	○	○	○
10. Most of my friends believe that you should only have sex in a serious relationship.	○	○	○	○	○
11. Among my friends alcohol is used to get someone to sleep with you.	○	○	○	○	○
12. My parents would disapprove of my being sexually active.	○	○	○	○	○
13. My friends approve of being involved with someone just for sex.	○	○	○	○	○
14. My friends brag about their sexual exploits.	○	○	○	○	○
15. My friends suggest dates to each other who are known to be sexually easy.	○	○	○	○	○
16. My parents encourage me to have sex with many people before I get married.	○	○	○	○	○
17. Among my friends, people seldom discuss their sexuality.	○	○	○	○	○
18. Among my friends, women who have the most sexual experience are the most highly regarded.	○	○	○	○	○
19. My father would have felt okay about my having casual sexual encounters.	○	○	○	○	○
20. My mother would only have approved of me having sex in a serious relationship.	○	○	○	○	○

Adolescent Perceived Costs and Benefits Scale for Sexual Intercourse

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The Adolescent Perceived Costs and Benefits Scale for Sexual Intercourse (Small, Silverberg, & Kerns, 1993) was developed to measure the costs and benefits that adolescents perceive for engaging in nonmarital sexual intercourse. Adolescent sexual activity is often viewed as problematic because of its potential risk to the adolescent's health and life prospects, as well as the possible negative consequences for the broader society. The present measure considers the adolescent as a decision maker and is based on the assumption that if we wish to understand why adolescents become sexually active, it is important to understand the positive and negative consequences adolescents associate with engaging in the behavior.

The scale is based on current research and theory on adolescent development, which views the adolescent as a decision maker and recognizes the importance of understanding the meanings that adolescents ascribe to behavior.

Development

The scale was developed over a multiyear period and involved extensive interviews with a diverse sample of adolescents. It underwent a number of refinements as a result of pilot testing. A parallel measure for assessing adolescents' perceptions of the costs and benefit of using alcohol is also available (see Philipp, 1993; Small et al., 1993).

Response Mode and Timing

The Adolescent Perceived Costs and Benefits Scale for Sexual Intercourse consists of two independent subscales of 10 items each. The *Perceived Costs* subscale assesses the perceived costs associated with engaging in sexual intercourse; the *Perceived Benefits* subscale assesses the perceived benefits of sexual activity. Each item is responded to using a 4-point Likert-type format. Responses range from 0 (*strongly disagree*) to 3 (*strongly agree*).

Respondents are asked to indicate the number corresponding to their degree of agreement or disagreement with each of the items. Each subscale takes approximately 3 to 5 minutes to complete.

Scoring

For each subscale a total perceived costs or benefits score is obtained by summing the 10 individual items. Scores can range from 0 to 30 with a higher score reflecting higher perceived costs or benefits. Individual items can also be examined to gain insight into the primary or modal reasons particular groups of adolescents perceive for engaging or not engaging in sexual intercourse.

Reliability

Internal reliability, as determined by Cronbach's alpha, was .86 for both the perceived costs and the perceived benefits subscales based on a sample of 2,444 male and female adolescents (Small et al. 1993). Based on a sample of 124 male and female adolescents, the subscales had a test–retest reliability over a 2-week period of .70 and .65 for the cost and benefits scales respectively.

Validity

As expected, Small et al. (1993) found that adolescents who were not sexually active perceived significantly more costs for engaging in sexual intercourse than their sexually active peers. The correlation between sexual intercourse status and perceived costs was $r = .32$. Females perceived more costs ($M = 17.30$) for engaging in sexual intercourse than their male counterparts ($M = 14.80$).

Small et al. (1993) reported that adolescent females perceived fewer significant benefits ($M = 17.68$) for engaging in sexual intercourse than their male peers ($M = 18.22$). The correlation between sexual activity status and the perceived benefits subscale was small but significant ($r = .11$). Overall, sexually active teens perceived more benefits than adolescents who were not sexually active. However, although the perceived benefits scores for the non-sexually active teens remained stable across grade levels, after the 9th grade there was a decrease in the perceived benefits scores of teens who were sexually active. Small et al. suggested two possible explanations for this finding. First, with experience sexually active teens may come to realize that many of their beliefs regarding the benefits of sexual intercourse do not hold true. Second, at younger ages, when sexual intercourse is generally less acceptable, teens must first believe there are many benefits for sexual intercourse before becoming

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sexually active. At older ages, when sexual activity is more acceptable, there is less of a need to be convinced of the value of the behavior before engaging in it.

In unpublished data, Small (1996) found that the regularity of birth control use among sexually active teens was positively correlated (r = .24) with the perceived costs subscale but was not correlated with the perceived benefits subscale. In addition, adolescents who reported more supportive and positive relations with their parents perceived more costs for engaging in sexual intercourse than adolescents who had a poorer relationship with their parents.

Small (1991) found that adolescents who intended to go on to college were more likely than their non-collegebound peers to report that fear of pregnancy was a primary reason for not having sexual intercourse. Consistent with the literature on adolescent peer influence, as the age of the adolescent increased, fewer agreed that peer pressure was a major reason why a teen would engage in sexual intercourse. Similarly, older teens were much more likely than younger teens to report that curiosity (i.e., "Teens have sex to see what it's like") was a reason for having sexual intercourse.

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Exhibit

Adolescent Perceived Costs and Benefits Scales for Sexual Intercourse

Below are some of the reasons that teens give for *not* having sexual intercourse. Please indicate how much you agree or disagree with each reason. If you're not sure, give your best guess.

	0 Strongly Disagree	1 Disagree	2 Agree	3 Strongly Agree
1. Teenagers don't have sex because they think it is morally wrong or against their religion.	○	○	○	○
2. Teenagers don't have sex because they don't want to get a sexually transmitted disease (STD) or a disease like AIDS.	○	○	○	○
3. Teenagers don't have sex because their parent(s) don't approve.	○	○	○	○
4. Teenagers don't have sex because they don't feel old enough to handle it.	○	○	○	○
5. Teenagers don't have sex because their friends won't approve.	○	○	○	○
6. Teenagers don't have sex because they or their partner might get pregnant.	○	○	○	○
7. Teenagers don't have sex because they aren't in love with anyone yet.	○	○	○	○
8. Teenagers don't have sex because they don't need it to make them happy.	○	○	○	○
9. Teenagers don't have sex because they would feel guilty.	○	○	○	○
10. Teenagers don't have sex because they or their partner might get pregnant which might mess up their future plans for college, school or a career.	○	○	○	○

Below are some of the reasons that teens give for having sexual intercourse. Please indicate how much you agree or disagree with each reason. If you're not sure, give your best guess.

	0 Strongly Disagree	1 Disagree	2 Agree	3 Strongly Agree
1. Teenagers have sex because it helps them forget their problems.	○	○	○	○
2. Teenagers have sex because it makes them feel grown up.	○	○	○	○

3.	Teenagers have sex because they want to get pregnant or become a parent.	○	○	○	○
4.	Teenagers have sex as a way to get or keep a boyfriend or girlfriend.	○	○	○	○
5.	Teenagers have sex because it makes them feel good.	○	○	○	○
6.	Teenagers have sex because it makes them feel loved.	○	○	○	○
7.	Teenagers have sex because they want to fit in with their friends.	○	○	○	○
8.	Teenagers have sex because they want to see what it's like.	○	○	○	○
9.	Teenagers have sex because it makes them feel more confident and sure of themselves.	○	○	○	○
10.	Teenagers have sex because people they admire or look up to make it seem like a "cool" thing to do.	○	○	○	○

3 Affect and Emotions

Types of Jealousy Scales

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Jealousy has been defined as a negative response to the actual, imagined, or expected emotional, and particularly sexual, involvement of one's partner with someone else (e.g., Buunk, 1991), and has been conceptualized as a multidimensional phenomenon (e.g., Sharpsteen, 1991). In line with these perspectives, our purpose was to develop separate scales for three types of jealousy. First, *reactive* jealousy refers to the degree of upset people experience if their partner would engage in a number of intimate behaviors with a third person. Second, *preventive* jealousy (also referred to as possessive jealousy or mate guarding; Buunk & Castro Solano, 2012) concerns an extreme preoccupation with even slight indications of interest on the part of one's partner in a third person, expressed through considerable efforts to prevent contact of the partner with individuals of the opposite sex. A similar phenomenon has been labelled behavioral jealousy by Pfeiffer and Wong (1989). Third, *anxious* jealousy refers to an obsessive focus upon the mere possibility of the sexual and emotional involvement of one's partner with someone else. This implies an active cognitive process in which one generates images of the partner becoming sexually involved with someone else, which leads to more or less obsessive anxiety, upset, suspiciousness, and worrying (similar to cognitive jealousy, as distinguished by Pfeiffer & Wong, 1989).

Whereas jealousy may signal that romantic partners care for each other and value their relationship enough to protect it, jealousy may also signal distrust and insecurity and may severely undermine the relationship. Because reactive jealousy constitutes a direct response to an actual relationship threat (for instance, one's partner is having sex with someone else), this type of jealousy can be considered as relatively healthy, and may be interpreted as a token of love and commitment. In contrast, both preventive and anxious jealousy may involve misperceptions of the partner's behavior, and may therefore result in criticism, arguments, blaming, relationship uncertainty and dissatisfaction, and even aggression.

Development

The items generated for the scale on *reactive jealousy* were based upon the Anticipated Sexual Jealousy Scale developed by Buunk (1998). The items for the *preventive jealousy* and *anxious jealousy* scales were based on earlier more extensive scales (Buunk, 1991), extensive interviews with people who had experienced jealousy, and on descriptions of clinical forms of jealousy (e.g., Hoaken, 1976; Jaremko & Lindsey, 1979).

Response Mode and Timing

The scale can be completed both by individuals with and without a committed intimate relationship. In the latter case, respondents are asked to think about how they would feel if they did have a relationship. All fifteen items (five per scale) are self-report items which participants respond to on a five-point, Likert-type scale. These Likert scales differ between the three subscales. The items for *reactive jealousy* are answered on a scale ranging from 1 (*not at all upset*) to 5 (*extremely upset*). The response scale for *preventive jealousy* range from 1 (*not applicable*) to 5 (*very much applicable*). The response scale for *anxious jealousy* ranges from 1 (*never*) to 5 (*very often*). The time to complete all three scales is typically about 2 to 3 minutes.

Scoring

The scores for each of the three subscales can be obtained by summing the scores on the five items for each subscale. *Reactive jealousy* items are 1 through 5, *preventive jealousy* items are 6 through 10, and *anxious jealousy* items are 11 through 15.

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Reliability

In the original study, the alpha reliabilities for the scales for *reactive jealousy, preventive jealousy* and *anxious jealousy* were respectively .76, .89 and .89 (Buunk, 1997). In subsequent studies, similar reliabilities were obtained: .76, .77, and .83 (Barelds & Dijkstra, 2003), .85, .88 and .72 (Barelds & Dijkstra, 2006, among both homosexuals and heterosexuals), 64, .78, and .87 (Study 1; Barelds & Dijkstra, 2007), .71, .76 and .89 (Study 2; Barelds & Dijkstra, 2007), .70, .78 and .87 (Study 3; Barelds & Dijkstra, 2007), 76, .76, and .86 (Study 1; Dijkstra & Barelds, 2008), .76, .74, and .82 (Study 2; Dijkstra & Barelds, 2008), .74, .85 and .92 (Buunk & Van Brummen-Girigori, 2016), and .80, .87 and .84 (Barelds, Dijkstra, Groothof & Pastoor, 2017; among both homosexuals and heterosexuals).

Validity

There is considerable evidence for the construct validity of the three scales. In two samples, Dijkstra and Barelds (2008) found that all three types of jealousy correlated positively with neuroticism and negatively with agreeableness. In the first study on the scales, Buunk (1997) found that all three types of jealousy were correlated with more or less maladaptive personality characteristics, including social anxiety, rigidity, hostility and a low self-esteem, and were more prevalent among later-borns than among first-borns. This latter effect was not due to differences in personality or attachment style, and may be due to the fact that parents often invest their material and immaterial resources more in first-borns and that therefore, more so than first-borns, later-borns have, throughout their childhood, had to compete with their siblings for the resources of their parents. Furthermore, those with a secure attachment style were consistently less jealous than those with an insecure style, and among those with an insecure style, the anxious-ambivalent were consistently more jealous than the avoidant.

There is also evidence for the discriminant validity of the three scales. Consistent with the idea that *reactive jealousy* constitutes a relatively healthy response to an actual relationship threat, whereas both *anxious* and *preventive jealousy* may become problematic for the relationship, Barelds and Dijkstra (2007) found in three studies that *reactive jealousy* was positively related to relationship quality, *anxious jealousy* was related negatively to relationship quality, and *preventive jealousy* was not related to relationship quality (see also Barelds & Dijkstra, 2003). More recently, Buunk and Van Brummen-Girigori (2016) showed that fertile women experienced more *preventive jealousy*, but not more *reactive jealousy*, than did non-fertile women. This was theoretically expected because fertile women may have a particular interest in safe-guarding the involvement of their partner in the present relationship.

Studies on the relationship between personality characteristics and the three types of jealousy provide additional evidence for the discriminant validity of the three scales. Neuroticism has been found to be related more strongly to *anxious* and *preventive jealousy* than to *reactive jealousy* (e.g., Barelds & Dijkstra, 2003; Buunk, 1997). Conscientiousness has been found to relate more strongly to *reactive jealousy* than to the other two types of jealousy (Dijkstra & Barelds, 2008). Conscientious individuals may be less likely to cheat and may also expect that their partner will not cheat. Also, in a related vein, Barelds, Dijkstra, Groothof and Pastoor (2017) showed that, among both homosexuals and heterosexuals, *anxious*, and especially *preventive*, jealousy were related to Dark Triad traits (Machiavellianism, psychopathy and narcissism), whereas *reactive jealousy* was not. As individuals reporting high Dark Triad scores are more likely to have been unfaithful, they may project their tendencies on the partner, fueling *anxious* and *preventive jealousy*.

Factor analysis has supported the conceptual independence of the three scales. Barelds and Dijkstra (2003) applied principal components analysis (PCA) with an oblique rotation (oblimin) to the scores of 1,366 participants. Three components were found (based on the Scree test and interpretation) which explained 57 percent of the variance. All fifteen items had their highest loading on the expected factor. In addition, congruence coefficients (Tucker's phi; Tucker, 1951) were computed between the three a priori factors (the three theoretical subscales), and the three factors found in the explorative PCA. These congruencies were very high (*reactive jealousy* $\varphi = .98$, *preventive jealousy* $\varphi = .97$, and *anxious jealousy* $\varphi = .99$), which strongly supports the structural validity of the scale.

The intercorrelations of the three scales are generally weak to moderate (e.g., Barelds & Dijkstra, 2003). In addition, the intercorrelations between the more clinical scales (i.e., the *preventive* and *anxious jealousy* scales) tend to be slightly higher than the correlations of these two types of jealousy with *reactive jealousy* (e.g., Barelds & Dijkstra, 2003; Buunk, 1997). Relations with biographical variables are generally weak, with just minor differences between men and women, people of different ages, and people with different relationship statuses (e.g., married, cohabiting, or dating; Barelds & Dijkstra, 2003).

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Exhibit

Types of Jealousy

Reactive Jealousy

How would you feel if your partner would …

	1 Not at all upset	2 A bit upset	3 Rather upset	4 Very upset	5 Extremely upset
1. …have sexual contact with someone else.	○	○	○	○	○
2. …discuss personal things with someone else.	○	○	○	○	○
3. …flirt with someone.	○	○	○	○	○
4. …dance intimately with someone else.	○	○	○	○	○
5. …kiss someone else.	○	○	○	○	○

Preventive Jealousy

Please indicate to what extent the following statements are applicable to you:

	1 Not applicable	2 Hardly applicable	3 Somewhat applicable	4 Quite applicable	5 Very much applicable
6. I don't want my partner to meet too many people of the opposite sex.	○	○	○	○	○
7. It is not acceptable to me if my partner sees people of the opposite sex on a friendly basis.	○	○	○	○	○
8. I demand from my partner that he/she does not look at other women/men.	○	○	○	○	○
9. I am quite possessive with respect to my partner.	○	○	○	○	○
10. I find it hard to let my partner go his/her own way.	○	○	○	○	○

Anxious Jealousy

Please indicate the extent to which you experience the following feelings:

	1 Never	2 Rarely	3 Occasionally	4 Quite often	5 Very often
11. I am concerned about my partner finding someone else more attractive than me.	○	○	○	○	○
12. I worry about the idea that my partner could have a sexual relationship with someone else.	○	○	○	○	○
13. I am afraid that my partner is sexually interested in someone else.	○	○	○	○	○
14. I am concerned about all the things that could happen if my partner meets members of the opposite sex.	○	○	○	○	○
15. I worry that my partner might leave me for someone else.	○	○	○	○	○

The Revised Mood and Sexuality Questionnaire

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The Revised Mood and Sexuality Questionnaire (MSQ-R; Janssen, Macapagal, & Mustanski, 2013) measures individual differences in the relationship between positive and negative mood states and various aspects of sexual desire, response, and behavior. This scale builds on the Mood and Sexuality Questionnaire (MSQ), a short 4-item questionnaire that asks about the effects of stress/anxiety and sadness/depression on sexual desire and response (Bancroft, Janssen, Strong, Carnes, et al., 2003; Bancroft, Janssen, Strong, & Vukadinovic, 2003). In contrast to the MSQ, the MSQ-R differentiates between positive and negative mood and between the effects of mood on desire for sex with a partner versus desire for masturbation, and it assesses possible behavioral or reciprocal effects (e.g., how sexual activity impacts mood).

Development

The MSQ-R evaluates the effects of three mood states: Anxiety/stress, sadness/depression, and happiness/cheerfulness. Ten questions are asked for each mood state for a total of thirty questions. Factor analyses were conducted on the data obtained from a sample of 1,983 men and women (Janssen et al., 2013). The sample included 632 heterosexual men, 422 homosexual men, and 929 heterosexual women. The analyses produced 8 factors which together accounted for 70 percent of the variance. The factors included the effects of anxiety/stress on sexual desire (*AnxDes*, factor loadings ranging from .76 to .81), the effects of sadness/depression on sexual desire (*DepDes*, factor loadings ranging from .71 to .83), and the effects of positive mood on sexuality (*HapSex*, factor loadings ranging from .59 to .82). In addition, factors were found that focus on the effects of negative mood on sexual arousal/response (*Arousal*), the effects of mood on regrettable behavior (*Regret*), the effects of mood on masturbation (*Mastur*), as well as the positive and negative effects of sexual activity when in a certain mood (*Improve; Worse)*. The factor loadings for these five factors ranged from .53 to .84.

Response Mode and Timing

For each mood state, six of the 10 items cover the effects of mood on sexual desire (i.e., thoughts about sex, overall

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desire for sex, and desire for sex specifically with one's own partner), the ability to become sexually aroused, masturbation frequency, and sexual behaviors one might regret later. For each question, participants are asked to indicate whether being in a certain mood state decreases, increases, or does not influence their desire or behavior (e.g., "When I feel anxious or stressed, I think about sex . . ."). Each item was rated on a 5-point Likert-type scale: 1 (*much less than usual*), 2 (*less than usual*), 3 (*same as usual*), 4 (*more than usual*), and 5 (*much more than usual*). The remaining four questions for each mood state cover the effects of sexual activity on the mood state (i.e., sex increases/decreases the intensity of the mood, sex makes one feel closer to one's partner, sex makes one feel better about oneself). Each item was rated on a 5-point scale: 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*usually*), and 5 (*always*). For questions involving a partner, the following additional answer option is given: "*I have not had a sexual partner in the past year*."

Scoring

MSQ-R scores are obtained by calculating the mean of the items in a given subscale (see Janssen et al., 2013).

Effect of anxiety/stress on sexual desire (*AnxDes*): Items 1, 2, and 3.

Effect of sadness/depression on sexual desire (*DepDes*): Items 11, 12, and 13.

Effect of positive mood on sexuality (*HapSex*): Items 32, 33, 35, 39, 40, and 41.

Effect of negative mood on sexual arousal/response (*Arousal*): Items 4 and 14.

Effect of mood on regrettable behavior (*Regret*): Items 5, 15, 34, and 36.

Effect of mood on masturbation (*Mastur*): Items 6, 16, and 37.

Positive effects of sex (*Improve*): Items 7, 8, 9, 17, 18, and 19.

Negative effects of sex on mood (*Worse*): Items 10, 20, and 38.

Although not included in the MSQ-R factor analyses and final item selection, items 21 to 31 represent the effects of anger on sexuality.

Reliability

Cronbach's alphas ranged between .60 and .88 (Janssen et al., 2013). For example, for the factor *AnxDes*, Cronbach's alphas were .87 for heterosexual men, .84 for heterosexual women, and .86 for homosexual men. For *DepDes*, Cronbach alphas were .87 for heterosexual men, .86 for heterosexual women, and .87 for homosexual men. And for the effect of positive mood on sexuality (*HapSex*), Cronbach's alphas were .82 for heterosexual men, .88 for heterosexual women, and .62 (or .68 after removing the item about closeness to one's own partner) for homosexual men.

Validity

Intercorrelations and correlations with various sexual behaviors varied by group. Focusing on the strongest correlations ($r > .20$), in heterosexual men, the tendency to experience increased desire during anxious mood states (*AnxDes*) was associated with an increased frequency of searching for sex online. For homosexual men, higher scores were associated with higher frequencies of offline sex. For heterosexual women, tendencies to experience increased desire during depressed (*DepDes*) and anxious states (*AnxDes*) were associated with higher levels of desire for sex with any partner and with a higher frequency of searching for partners in bars, clubs, or at parties. The tendency to experience increased desire during anxious mood states was associated with higher masturbation frequencies, especially in women.

Correlations involving the *HapSex* scale indicated that greater effects of positive mood on sexuality were associated with increased frequency of masturbation and desire for sex in women. For all groups, greater effects of positive mood on sexuality were correlated with a higher frequency of intercourse. The effect of negative mood on sexual desire/response (*Arousal*) scale did not reveal as strong an association with our sexual behavior variables.

In heterosexual men and women, the likelihood of doing things one regrets (*Regret*) was positively correlated with desire for sex with any partner. For women, higher scores were also linked with a greater frequency of searching for partners in bars, clubs, and at parties, among other behaviors. For homosexual men, higher scores were linked with higher frequencies of visiting erotic websites.

In each of the three groups, the tendency to masturbate more when in a certain mood state (*Mastur*) was associated with a generally higher frequency of masturbation. Also, some significant correlations were found with the negative effects of sex (*Worse*) and, in particular, the positive effects of sex (*Improve*) scales. In all three samples, the tendency to experience positive effects of sex when one is in a negative mood state was associated with a higher frequency of sexual intercourse, among other behaviors.

Consistent with findings from studies using the 4-item MSQ (e.g., Bancroft, Janssen, Strong, & Vukadinovic, 2003; Bancroft, Janssen, Strong, Carnes, et al., 2003; Lykins, Janssen, & Graham, 2006), the MSQ-R revealed substantial variability in how different mood states impact men's and women's sexuality. This variability was found not only in the effects of mood on sexual desire and arousal, but also in the effects of mood on various behavioral domains, and in the effects of sexual activity on mood. In a sample of heterosexual men and women, Mark, Janssen, and Milhausen (2011) found that the *Regret* scale was a significant predictor of self-reported infidelity. Moreover, in a sample of newlywed men and women, Lykins, Janssen,

Newhouse, Heiman, and Rafaeli (2012) found that couple similarity in the sexual effects of anxiety and stress was a significant predictor of women's problems with sexual arousal, and that similarity in how happiness impacts couples' sexuality was a significant predictor of men's sexual satisfaction. Although preliminary in nature, these findings underscore the value of examining individual differences in how mood influences sexuality and illustrate their relevance to our understanding of various aspects of sexual function and behavior.

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Exhibit

Revised Mood and Sexuality Questionnaire

Male Version

In this questionnaire you will find statements about what typically happens to your sexual desire and sexual response when you are in one of the following mood states: anxious or stressed, sad or depressed, angry or frustrated, or happy or cheerful. Please read each statement carefully and decide how you would typically react when you feel like that.

The word 'sex' refers to sexual intercourse (entry of the penis in vagina or anus) as well as other types of sexual behavior (e.g., oral or manual stimulation of penis or vagina).

The word 'sexual partner' refers to a person with whom you currently are in a sexual relationship, or with whom you had a sexual relationship anytime in the past year. This relationship can be exclusive/monogamous (that is, you have or had sex only with each other) or non-exclusive/non-monogamous (that is, one or both of you has or had sex with other partners).

1a. How often do you feel anxious or stressed?

- ☐ Never
- ☐ Occasionally
- ☐ Often
- ☐ Very often

1b. How anxious or stressed *can* you feel?

- ☐ I never feel anxious or stressed
- ☐ Somewhat, similar to most people I know
- ☐ Strongly, more than most people I know
- ☐ Very strongly, much more than most people I know

2a. How often do you feel sad or depressed?

- ☐ Never
- ☐ Occasionally
- ☐ Often
- ☐ Very often

2b. How sad or depressed *can* you feel?

- ☐ I never feel sad or depressed
- ☐ Somewhat, similar to most people I know
- ☐ Strongly, more than most people I know
- ☐ Very strongly, much more than most people I know

3a. How often do you feel angry or frustrated?

- ☐ Never
- ☐ Occasionally
- ☐ Often
- ☐ Very often

3b. How angry or frustrated *can* you feel?

- ☐ I never feel angry or frustrated
- ☐ Somewhat, similar to most people I know
- ☐ Strongly, more than most people I know
- ☐ Very strongly, much more than most people I know

4a. How often do you feel happy or cheerful?

- ☐ Never
- ☐ Occasionally

4b. How happy or cheerful *can* you feel?

- ☐ I never feel happy or cheerful
- ☐ Somewhat, similar to most people I know

- ☐ Often
- ☐ Very often
- ☐ Strongly, more than most people know
- ☐ Very strongly, much more than most people I know

5. Typically, when you experience depression, do you feel anxious or agitated at the same time?

- ☐ Yes
- ☐ No
- ☐ I don't know

Sexual Activity Questions

Before we ask you more specific questions about how your sexual desire and sexual response are affected when you are in a certain mood state, we would like to know a few things about your sexual life in general. In answering the following questions, please think of a typical month during the last year (e.g., not on vacation or unusually busy).

How often did you …

1. Think about sex?
   - ☐ Not once
   - ☐ One or two times
   - ☐ Once a week
   - ☐ A few times a week
   - ☐ Once a day
   - ☐ Several times a day
2. Feel like initiating sex with your sexual partner?
   - ☐ Not once
   - ☐ One or two times
   - ☐ Once a week
   - ☐ A few times a week
   - ☐ Once a day
   - ☐ Several times a day
   - ☐ *Not applicable (no partner)*
3. Feel like having sex with somebody (not necessarily with your partner)?
   - ☐ Not once
   - ☐ One or two times
   - ☐ Once a week
   - ☐ A few times a week
   - ☐ Once a day
   - ☐ Several times a day
4. Feel like doing something sexual that you regretted later?
   - ☐ Not once
   - ☐ One or two times
   - ☐ Once a week
   - ☐ A few times a week
   - ☐ Once a day
   - ☐ Several times a day
5. Masturbate on your own?
   - ☐ Not once
   - ☐ One or two times
   - ☐ Once a week
   - ☐ A few times a week
   - ☐ Once a day
   - ☐ Several times a day
6. Experience difficulty in obtaining or maintaining an erection during sexual activity?
   - ☐ Most of the time
   - ☐ Less than half the time
   - ☐ Occasionally
   - ☐ Never

When I feel anxious or stressed . . .

The next questions are about the effect of being anxious/stressed/tense on your sexuality. When answering the questions, please try to think of times during the past year that you actually felt anxious or stressed or tense. For example, you may feel anxious or stressed when you are under pressure to perform or to get certain tasks done. Or you may be anxious or stressed when you're under pressure to meet your financial responsibilities (e.g., paying bills). Or you may feel anxious or stressed because you feel uneasy about something and not be sure what it is. Try and think of what happens when you are in situations like this, when you feel anxious or stressed.

In answering the questions, please ignore possible situations in which (the prospect of) sexual activity itself was a source of stress or anxiety.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
1. When I feel anxious or stressed, I think about sex.	1	2	3	4	5
2. When I feel anxious or stressed, I feel like initiating sex with my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
3. When I feel anxious or stressed, I feel like having sex with somebody (not necessarily with my partner).	1	2	3	4	5
4. When I feel anxious or stressed, my ability to get or keep an erection is.	1	2	3	4	5
5. When I feel anxious or stressed, I am likely to do something sexual that I regret later.	1	2	3	4	5
6. When I feel anxious or stressed, I masturbate on my own.	1	2	3	4	5
	Never	**Rarely**	**Sometimes**	**Usually**	**Always**
7. When I feel anxious or stressed, sexual activity makes me feel less anxious or stressed.	1	2	3	4	5
8. When I feel anxious or stressed, sexual activity makes me feel closer to my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
9. When I feel anxious or stressed, sexual activity makes me feel better about myself.	1	2	3	4	5
10. When I feel anxious or stressed, sexual activity makes me feel more anxious/stressed.	1	2	3	4	5

When I feel sad or depressed . . .

The next questions are about the effect of sadness/depression/feeling low or down on your sexuality. When answering the questions, please try to think of times during the past year that you actually felt sad or depressed. You can think of situations or events that can make or have made you feel sad. For example, you may have felt sad or depressed when unpleasant things happened in your relationships with others (e.g., a break-up, a disagreement), or when someone you cared about moved or passed away. But you can also feel sad when you read or watch upsetting things (e.g., movies). Or you may have just felt sad or depressed, not knowing exactly why.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
11. When I feel sad or depressed, I think about sex.	1	2	3	4	5
12. When I feel sad or depressed, I feel like initiating sex with my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
13. When I feel sad or depressed, I feel like having sex with somebody (not necessarily with my partner).	1	2	3	4	5

14. When I feel sad or depressed, my ability to get or keep an erection is.	1	2	3	4	5
15. When I feel sad or depressed, I do something sexual that I regret later.	1	2	3	4	5
16. When I feel sad or depressed, I masturbate on my own.	1	2	3	4	5

	Never	**Rarely**	**Sometimes**	**Usually**	**Always**
17. When I feel sad or depressed, sexual activity makes me feel less sad or depressed.	1	2	3	4	5
18. When I feel sad or depressed, sexual activity makes me feel closer to my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
19. When I feel sad or depressed, sexual activity makes me feel better about myself.	1	2	3	4	5
20. When I feel sad or depressed, sexual activity makes me feel more sad/depressed.	1	2	3	4	5

When I feel angry or frustrated . . .

The next questions are about the effect of feeling angry/irritated/annoyed/frustrated on your sexuality. When answering the questions, please try to think of times during the past year that you indeed felt angry. For example, you may have felt angry when things did not happen or turn out the way you wanted them to, when certain tasks took longer or were more difficult than you expected, or when people seemed to be working against you.

With the exception of question 23, the questions are *not* about being angry at your partner.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
21. When I feel angry or frustrated, I think about sex.	1	2	3	4	5
22. When I feel angry or frustrated, I feel like initiating sex with my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
23. When I feel angry or frustrated *with my partner*, I feel like initiating sex with her or him (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
24. When I feel angry or frustrated, I feel like having sex with somebody (not necessarily with my partner).	1	2	3	4	5
25. When I feel angry or frustrated, my ability to get or keep an erection is.	1	2	3	4	5
26. When I feel angry or frustrated, I do something sexual that I regret later.	1	2	3	4	5
27. When I feel angry or frustrated, I masturbate on my own.	1	2	3	4	5

	Never	Rarely	Sometimes	Usually	Always
28. When I feel angry or frustrated, sexual activity makes me feel less angry or frustrated.	1	2	3	4	5
29. When I feel angry or frustrated, sexual activity makes me feel closer to my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
30. When I feel angry or frustrated, sexual activity makes me feel better about myself.	1	2	3	4	5
31. When I feel angry or frustrated, sexual activity makes me feel more angry/frustrated.	1	2	3	4	5

When I feel happy or cheerful . . .

The next questions are about the effect of feeling happy or cheerful on your sexuality. For example, during the past year you may have felt happy or cheerful when you did something you felt proud about, when you won something, when someone did or said something nice to or for you, or when something happened you had hoped for. Or you may have just felt happy or cheerful, for no apparent reason. Try and think of what happens when you are in one of those situations, when you feel happy or cheerful.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
32. When I feel happy or cheerful, I think about sex.	1	2	3	4	5
33. When I feel happy or cheerful, I feel like initiating sex with my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
34. When I feel happy or cheerful, I feel like having sex with somebody (not necessarily with my partner).	1	2	3	4	5
35. When I feel happy or cheerful, my ability to get or keep an erection is.	1	2	3	4	5
36. When I feel happy or cheerful, I do something sexual that I regret later.	1	2	3	4	5
37. When I feel happy or cheerful, I masturbate on my own.	1	2	3	4	5
	Never	Rarely	Sometimes	Usually	Always
38. When I feel happy or cheerful, sexual activity makes me feel less happy or cheerful.	1	2	3	4	5
39. When I feel happy or cheerful, sexual activity makes me feel closer to my partner (☐ I have not had a sexual partner in the past year).	1	2	3	4	5
40. When I feel happy or cheerful, sexual activity makes me feel better about myself.	1	2	3	4	5
41. When I feel happy or cheerful, sexual activity makes me feel more happy or cheerful.	1	2	3	4	5

Female Version

In this questionnaire you will find statements about what typically happens to your sexual desire and sexual response when you are in one of the following mood states: anxious or stressed, sad or depressed, angry or frustrated, or happy or cheerful. Please read each statement carefully and decide how you would typically react when you feel like that.

The word 'sex' refers to sexual intercourse (entry of the penis in vagina or anus) as well as other types of sexual behavior (e.g., oral or manual stimulation of penis or vagina).

The word 'sexual partner' refers to a person with whom you currently are in a sexual relationship, or with whom you had a sexual relationship anytime in the past year. This relationship can be exclusive/monogamous (that is, you have or had sex only with each other) or non-exclusive/non-monogamous (that is, one or both of you has or had sex with other partners).

1a. How often do you feel anxious or stressed?

- ☐ Never
- ☐ Occasionally
- ☐ Often
- ☐ Very often

1b. How anxious or stressed *can* you feel?

- ☐ I never feel anxious or stressed
- ☐ Somewhat, similar to most people I know
- ☐ Strongly, more than most people I know
- ☐ Very strongly, much more than most people I know

2a. How often do you feel sad or depressed?

- ☐ Never
- ☐ Occasionally

2b. How sad or depressed *can* you feel?

- ☐ I never feel sad or depressed
- ☐ Somewhat, similar to most people I know

☐ Often
☐ Very often

☐ Strongly, more than most people I know
☐ Very strongly, much more than most people I know

3a. How often do you feel angry or frustrated?

☐ Never
☐ Occasionally
☐ Often
☐ Very often

3b. How angry or frustrated *can* you feel?

☐ I never feel angry or frustrated
☐ Somewhat, similar to most people I know
☐ Strongly, more than most people I know
☐ Very strongly, much more than most people I know

4a. How often do you feel happy or cheerful?

☐ Never
☐ Occasionally
☐ Often
☐ Very often

4b. How happy or cheerful *can* you feel?

☐ I never feel happy or cheerful
☐ Somewhat, similar to most people I know
☐ Strongly, more than most people I know
☐ Very strongly, much more than most people I know

5. Typically, when you experience depression, do you feel anxious or agitated at the same time?

☐ Yes
☐ No
☐ I don't know

6a. What is your menopausal status?

☐ I am pre-menopausal, and have
  ☐ regular menstrual cycles
  ☐ irregular menstrual cycles
☐ I am peri-menopausal*
☐ I am post-menopausal
☐ other, please describe ……

6b. Do you experience negative mood around the time of your period?

☐ Yes
☐ No
☐ I don't know
☐ I no longer have menstrual cycles

**Perimenopausal means that your periods are getting more irregular, or changing in some way, and you are getting hot flashes or night sweats; i.e., you are approaching the menopause but are still menstruating to some extent.*

Sexual Activity Questions

Before we ask you more specific questions about how your sexual desire and sexual response are affected when you are in a certain mood state, we would like to know a few things about your sexual life in general. In answering the following questions, please think of a typical month during the last year (e.g., not on vacation or unusually busy).

How often did you . . .

1. Think about sex?

☐ Not once
☐ One or two times
☐ Once a week
☐ A few times a week
☐ Once a day
☐ Several times a day

2. Feel like initiating sex with your sexual partner?

☐ Not once
☐ One or two times
☐ Once a week
☐ A few times a week
☐ Once a day
☐ Several times a day
☐ *Not applicable (no partner)*

3. Feel like having sex with somebody (not necessarily with your partner)?

☐ Not once
☐ One or two times
☐ Once a week
☐ A few times a week

☐ Once a day
☐ Several times a day

4. Feel like doing something sexual that you would regret later?
☐ Not once
☐ One or two times
☐ Once a week
☐ A few times a week
☐ Once a day
☐ Several times a day

5. Masturbate on your own?
☐ Not once
☐ One or two times
☐ Once a week
☐ A few times a week
☐ Once a day
☐ Several times a day

6. Experience difficulty in obtaining or maintaining sexual arousal during sexual activity?
☐ Most of the time
☐ Less than half the time
☐ Occasionally
☐ Never

When I feel anxious or stressed . . .

The next questions are about the effect of being anxious/stressed/tense on your sexuality. When answering the questions, please try to think of times during the past year that you actually felt anxious or stressed or tense. For example, you may feel anxious or stressed when you are under pressure to perform or to get certain tasks done. Or you may be anxious or stressed when you're under pressure to meet your financial responsibilities (e.g., paying bills). Or you may feel anxious or stressed because you feel uneasy about something and not be sure what it is. Try and think of what happens when you are in situations like this, when you feel anxious or stressed.

In answering the questions, please ignore possible situations in which (the prospect of) sexual activity itself was a source of stress or anxiety.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
1. When I feel anxious or stressed, I think about sex	1	2	3	4	5
2. When I feel anxious or stressed, I feel like initiating sex with my partner (I have not had a sexual partner in the past year)	1	2	3	4	5
3. When I feel anxious or stressed, I feel like having sex with somebody (not necessarily with my partner)	1	2	3	4	5
4. When I feel anxious or stressed, my ability to get or stay sexually aroused is	1	2	3	4	5
5. When I feel anxious or stressed, I am likely to do something sexual that I regret later	1	2	3	4	5
6. When I feel anxious or stressed, I masturbate on my own	1	2	3	4	5
	Never	Rarely	Sometimes	Usually	Always
7. When I feel anxious or stressed, sexual activity makes me feel less anxious or stressed	1	2	3	4	5
8. When I feel anxious or stressed, sexual activity makes me feel closer to my partner (I have not had a sexual partner in the past year)	1	2	3	4	5
9. When I feel anxious or stressed, sexual activity makes me feel better about myself	1	2	3	4	5
10. When I feel anxious or stressed, sexual activity makes me feel more anxious/stressed	1	2	3	4	5

When I feel sad or depressed . . .

The next questions are about the effect of sadness/depression/feeling low or down on your sexuality. When answering the questions, please try to think of times during the past year that you actually felt sad or depressed. You can think of situations or events that can make or have made you feel sad. For example, you may have felt sad or depressed when unpleasant things happened in your relationships with others (e.g., a break-up, a disagreement), or when someone you cared about moved or passed away. But you can also feel sad when you read or watch upsetting things (e.g., movies). Or you may have just felt sad or depressed, not knowing exactly why.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
11. When I feel sad or depressed, I think about sex	1	2	3	4	5
12. When I feel sad or depressed, I feel like initiating sex with my partner (☐ I have not had a sexual partner in the past year)	1	2	3	4	5
13. When I feel sad or depressed, I feel like having sex with somebody (not necessarily with my partner)	1	2	3	4	5
14. When I feel sad or depressed, my ability to get or stay sexually aroused is	1	2	3	4	5
15. When I feel sad or depressed, I do something sexual that I regret later	1	2	3	4	5
16. When I feel sad or depressed, I masturbate on my own	1	2	3	4	5
	Never	Rarely	Sometimes	Usually	Always
17. When I feel sad or depressed, sexual activity makes me feel less sad or depressed	1	2	3	4	5
18. When I feel sad or depressed, sexual activity makes me feel closer to my partner (☐ I have not had a sexual partner in the past year)	1	2	3	4	5
19. When I feel sad or depressed, sexual activity makes me feel better about myself	1	2	3	4	5
20. When I feel sad or depressed, sexual activity makes me feel more sad/depressed	1	2	3	4	5

When I feel angry or frustrated . . .

The next questions are about the effect of feeling angry/irritated/annoyed/frustrated on your sexuality. When answering the questions, please try to think of times during the past year that you indeed felt angry. For example, you may have felt angry when things did not happen or turn out the way you wanted them to, when certain tasks took longer or were more difficult than you expected, or when people seemed to be working against you.

With the exception of question 23, the questions are *not* about being angry at your partner.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
21. When I feel angry or frustrated, I think about sex	1	2	3	4	5
22. When I feel angry or frustrated, I feel like initiating sex with my partner (☐ I have not had a sexual partner in the past year)	1	2	3	4	5
23. When I feel angry or frustrated *with my partner*, I feel like initiating sex with her or him (☐ I have not had a sexual partner in the past year)	1	2	3	4	5

24. When I feel angry or frustrated, I feel like having sex with somebody (not necessarily with my partner)	1	2	3	4	5
25. When I feel angry or frustrated, my ability to get or stay sexually aroused is	1	2	3	4	5
26. When I feel angry or frustrated, I do something sexual that I regret later	1	2	3	4	5
27. When I feel angry or frustrated, I masturbate on my own	1	2	3	4	5

	Never	Rarely	Sometimes	Usually	Always
28. When I feel angry or frustrated, sexual activity makes me feel less angry or frustrated	1	2	3	4	5
29. When I feel angry or frustrated, sexual activity makes me feel closer to my partner (☐ I have not had a sexual partner in the past year)	1	2	3	4	5
30. When I feel angry or frustrated, sexual activity makes me feel better about myself	1	2	3	4	5
31. When I feel angry or frustrated, sexual activity makes me feel more angry/frustrated	1	2	3	4	5

When I feel happy or cheerful . . .

The next questions are about the effect of feeling happy or cheerful on your sexuality. For example, during the past year you may have felt happy or cheerful when you did something you felt proud about, when you won something, when someone did or said something nice to or for you, or when something happened you had hoped for. Or you may have just felt happy or cheerful, for no apparent reason. Try and think of what happens when you are in one of those situations, when you feel happy or cheerful.

	Much less than usual	Less than usual	Same as usual	More than usual	Much more than usual
32. When I feel happy or cheerful, I think about sex	1	2	3	4	5
33. When I feel happy or cheerful, I feel like initiating sex with my partner (☐ I have not had a sexual partner in the past year)	1	2	3	4	5
34. When I feel happy or cheerful, I feel like having sex with somebody (not necessarily with my partner)	1	2	3	4	5
35. When I feel happy or cheerful, my ability to get or stay sexually aroused is	1	2	3	4	5
36. When I feel happy or cheerful, I do something sexual that I regret later	1	2	3	4	5
37. When I feel happy or cheerful, I masturbate on my own	1	2	3	4	5

	Never	Rarely	Sometimes	Usually	Always
38. When I feel happy or cheerful, sexual activity makes me feel less happy or cheerful	1	2	3	4	5
39. When I feel happy or cheerful, sexual activity makes me feel closer to my partner (☐ I have not had a sexual partner in the past year)	1	2	3	4	5
40. When I feel happy or cheerful, sexual activity makes me feel better about myself	1	2	3	4	5
41. When I feel happy or cheerful, sexual activity makes me feel more happy or cheerful	1	2	3	4	5

Cognitive and Behavioral Outcomes of Sexual Behavior Scale

Kimberly R. McBride,[3] *The University of Toledo*
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The term *sexual compulsivity* (SC) is used to describe sexual behaviors that may be beyond an individual's control and that subsequently could lead to impairment in functioning as well as a range of negative outcomes.

Development

The Society for the Advancement of Sexual Health (SASH) has offered a list of outcomes that may occur if a person or behaviors are sexually compulsive. This outcomes-based understanding of sexual compulsivity would suggest that individuals and their behaviors (including behaviors that they do alone, such as masturbation, as well as those that they do with other people, such as having intercourse) could lead to negative consequences in various domains, including social, emotional, physical, legal, financial/occupational, and spiritual areas of life (Reece, Dodge, & McBride, 2006). The Cognitive and Behavioral Outcomes of Sexual Behavior Scale (CBOSBS) was developed to measure the extent to which an individual has experienced negative outcomes in one or more of the six domains identified by SASH.

Items were generated by the researchers based on theoretical understandings of SC and guided by the outcomes suggested by SASH. The scale includes a cognitive outcomes component and a behavioral outcomes component to measure both the extent to which a person is concerned about negative outcomes resulting from their sexual behaviors, and the extent to which such outcomes are actually experienced.

Pilot testing was conducted in a nonclinical sample of young adults (Perera, Reece, Monahan, Billingham, & Finn, 2009a, 2009b). Scale validation was performed in a nonclinical sample of young adults ($N = 390$; McBride, Reece, & Sanders, 2007, 2008). Analyses were conducted to assess the psychometric properties of the CBOSBS and the extent to which those in the sample reported experiencing negative outcomes resulting from their sexual behaviors.

Response Mode and Timing

The cognitive items ask participants to rate the extent to which they have worried that the things they have done sexually in the past year have resulted in a specified outcome. The behavioral items ask participants to indicate whether they have experienced a particular outcome within the previous year. The scale is self-administered and typically takes 10 minutes to complete.

Scoring

For each scale (*Cognitive* and *Behavioral*), items assess six potential types of outcomes (financial/occupational, legal, physical, psychological, spiritual, social).

Cognitive items (items 1 through 20) are scored on a 4-point Likert-type scale of 0 (*Never*) to 3 (*Always*). Total score range for the cognitive outcome items is 0 to 60. The dichotomous *Behavioral* items (items 21 through 36) are scored by assigning a 0 score to items answered "No" and 1 to "Yes" responses. Total score range for the behavioral items is 0 to 16. Total CBOSBS scores range from 0 to 76 and are calculated by adding cognitive and behavioral scores. The threshold for SC is reached when scores meet or exceed the 80th percentile.

Reliability

Reliability of the CBOSBS was assessed using Cronbach's alpha for internal consistency reliability; separate analyses of the cognitive and behavioral items were conducted. Internal consistency for the 20-item *Cognitive* scale was high ($\alpha = .89$), with a slightly lower level of reliability ($\alpha = .75$) for the 16-item *Behavioral* scale. However, given that the response scale for the behavioral items was dichotomous, this level is quite acceptable. Separate reliability estimates were calculated for each of the six factors (or subscales). Cronbach's alpha for internal consistency was found to be high for all of the factors, or subscales, indicating scale reliability in this sample. Although some of the subscales with high Cronbach's alpha levels and elevated correlations may be worth revising, the overall inter-item correlation matrix, again, does not suggest a unidimensional scale. Testing in large samples with diverse demographic characteristics and perhaps greater numbers of negative outcomes is warranted before making the decision to drop items. Given the low occurrence of negative outcomes associated with sexual behaviors in this young nonclinical sample, the decision was made to use total scale scores for remaining analyses.

Validity

Construct validity for the 20 cognitive outcomes items was tested using a principal component analysis with varimax

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rotation, specifying six factors because items were constructed to focus on the six outcome categories articulated by SASH. Overall, the six-factor solution explained 74.8 percent of the total variance. The inter-item correlation matrix did not yield correlations high enough to suggest that the scale is unidimensional. However, a few specific inter-item correlations were high enough that it may be appropriate to eliminate one or more of the items. For example, items assessing worry about financial problems and worry about wasting money were highly correlated, suggesting they were essentially measuring the same thing in this sample.

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Exhibit

Cognitive and Behavioral Outcomes of Sexual Behavior Scale

Below is a list of things that some people worry about as a result of their sexual activities (including things people do alone and those they do with others). Please indicate the extent to which the following apply to you.

I am worried that the things I have done sexually:

	Never	Sometimes	Often	Always
1. Might have placed me or one of my sex partners at risk for pregnancy.	○	○	○	○
2. Might have placed me or one of my sex partners at risk for a sexually transmitted infection (like herpes, gonorrhea, or crabs).	○	○	○	○
3. Might have placed me or one of my sex partners at risk for HIV.	○	○	○	○
4. Might have resulted in pain, injury, or other problems for one of my sex partners.	○	○	○	○
5. Might have resulted in pain, injury, or other problems for myself.	○	○	○	○
6. Might have presented the potential for serious physical injury or death.	○	○	○	○
7. Might be leading to problems with my friends.	○	○	○	○
8. Might be leading to problems with my family members.	○	○	○	○
9. Might be leading to problems with my boyfriend/girlfriend/spouse.	○	○	○	○
10. Might have placed me at risk of being arrested.	○	○	○	○
11. Might have been against the law.	○	○	○	○
12. Might have led to financial problems.	○	○	○	○
13. Might have caused me to waste my money.	○	○	○	○
14. Were interfering with my ability to complete tasks for work or school.	○	○	○	○
15. Might have presented the potential for me to lose my job.	○	○	○	○
16. Could lead to school-related problems, such as probation, expulsion, or other sanctions.	○	○	○	○
17. Were inconsistent with my spiritual beliefs.	○	○	○	○
18. Were inconsistent with my religious values.	○	○	○	○
19. Were making me feel guilty.	○	○	○	○
20. Were making me ashamed of myself.	○	○	○	○

Below is a list of things that sometimes happen to people as a result of their sexual activities (including those they do alone and those they do with others). Please indicate whether these things have happened to you during the last year as a result of your sexual activities. In the past year, as a result of the things you have done sexually, did the following happen to you:

	Yes	No
21. I or my sexual partner(s) became pregnant.	○	○
22. I contracted a sexually transmitted infection.	○	○
23. I contracted HIV.	○	○
24. I gave someone else a sexually transmitted infection.	○	○
25. I gave someone else HIV.	○	○
26. I caused pain, injury, or other physical problems for myself.	○	○
27. I caused pain, injury, or other physical problems for a sex partner.	○	○
28. My relationships with friends and/or family members were damaged.	○	○
29. My relationships with a spouse or other relationship partner were damaged.	○	○
30. I was arrested.	○	○
31. I experienced financial problems.	○	○
32. I experienced problems at school.	○	○
33. I experienced problems at work.	○	○
34. I experienced spiritual distress.	○	○
35. I was embarrassed or ashamed of myself.	○	○
36. I felt guilty.	○	○

Revised Mosher Guilt Inventory

Donald L. Mosher

The Mosher Guilt Inventories measure three aspects of the personality disposition of guilt: Sex-Guilt, Hostility-Guilt, and Morality-Conscience. Multitrait–multimethod matrices have provided evidence for the discriminant validity of the three guilt subscales (Mosher, 1966, 1968). Sex guilt is psychologically magnified (Tomkins, 1979) in scenes involving awareness of sexual arousal, the discrete affects of interest-excitement and enjoyment-joy, and the discrete affect of shame, which appears in consciousness as guilt due to its associations with moral cognitions about sexual conduct. Hostility guilt is psychologically magnified in scenes involving the discrete affects of anger-rage and guilty affect and cognition about the immorality of aggressive behavior or cognitions. Conscience is psychologically magnified in scenes involving moral temptations and/or guilty affect about the self. The inventory is measuring three aspects of guilt conceived as a *script*, which is defined by Tomkins (1979) as a set of rules for the interpretation, prediction, production, control, and evaluation of a co-assembled set of scenes that has been further amplified by affect. The Mosher Guilt Inventories, as measures of these guilty scripts, have a considerable body of evidence supporting their construct validity.

Development

The Mosher Guilt Inventories (Mosher, 1961, 1966, 1968) were developed from responses given to sentence completion stems in 1960. The weights used in scoring the sentence completion were assigned to items from the scoring manual to construct true-false and forced-choice inventories for men and women, because the scoring manual had been developed to score each sex separately. O'Grady and Janda (1979) demonstrated there was no need to use weights because a 1 or 0 scoring procedure for guilty and nonguilty responses was correlated .99 with the weighted system. To compare the sexes, it was necessary either to transform the raw scores to standard scores, or to give the same inventory to both sexes, which seemed to create no problems. During the past 30+ years, the range of guilt scores has been truncated as the means have dropped, particularly for sex guilt (Mosher & O'Grady, 1979). The 39 items in the female form of the forced-choice sex guilt inventory, in comparison to 28 for men, have continued to be a successful predictor of a broad range of sexually related behavior, cognitions, and affects in spite of containing items drawing 100 percent nonguilty choices.

Given the unusually strong evidence of construct validity for the inventories, I was reluctant to generate a new set of items that might be conceptually better but would limit generalization from past research. Instead, I submitted the nonoverlapping items contained in both male and female versions of the true-false (233 items) and the forced-choice (151 items) inventory to a sample of 187 male and 221 female University of Connecticut undergraduates for an updated item analysis. As suspected, many guilty-true items and guilty-forced-choice alternatives were uniformly rejected in that sample. The resulting Revised Mosher Guilt Inventory continues to measure Sex-Guilt, Hostility-Guilt, and Morality-Conscience, but it is now in a limited-comparison format that was selected to increase the range of response and to eliminate complaints about the forced-choice format.

The Revised Mosher Guilt Inventory consists of 114 items, arranged in pairs of responses to the same sentence completion stem, in 7-point Likert-type format to measure (a) *Sex-Guilt*—50 items, (b) *Hostility-Guilt*—42 items, and (c) *Guilty-Conscience*—22 items. Items were selected from an item analysis of the 151 forced-choice items in the original inventories. For the selected items, the correlations of the items with the subscale totals ranged from .32 to .62 with a median of .46. In addition, to ensure discriminant validity between the subscales, 90 percent of the items had a correlation with its own subscale that was significantly different from the correlation of the item with the other subscale totals. Several Morality-Conscience items were too highly correlated with Sex-Guilt, and thus were eliminated. This subscale was renamed Guilty-Conscience to reflect more adequately the retained items. The inventory is suited for adult populations.

Response Mode and Timing

Subjects respond to items by rating their response on a 7-point subscale from 0 (*not at all true of [for] me*) to 6 (*extremely true of [for] me*). Items are arranged in sets of two different completions to a single stem—the limited-comparison format—to permit subjects to compare the intensity of *trueness* for them because people generally find one alternative is more or less *true* for them. The inventory can be completed in approximately 20 minutes. Subscales can be omitted or given separately.

Scoring

Scores are summed for each subscale by reversing the non-guilty alternatives. Higher scores indicate more scripted guilt.

The items for *Sex-Guilt* are 6, 7, 12, 13, 16, 18, 25, 31, 36, 42, 51, 54, 61, 64, 67, 71, 75, 81, 83, 88, 93, 102, 103, 108, 112

Reverse score: 5, 8, 11, 14, 15, 17, 26, 32, 35, 41, 52, 53, 62, 63, 72, 76, 78, 82, 84, 87, 94, 101, 104, 107, 111

The items for *Hostility-Guilt* are 4, 19, 20, 23, 30, 33, 38, 39, 43, 44, 45, 55, 70, 77, 79, 85, 91, 95, 98, 100, 109, 113

Reverse score: 3, 21, 22, 24, 29, 34, 37, 40, 46, 56, 69, 78, 80, 86, 92, 96, 97, 99, 110, 114

The items for *Guilty-Conscience* are 2, 10, 28, 48, 49, 57, 59, 65, 73, 89, 105

Reverse score: 1, 9, 27, 47, 50, 58, 60, 66, 74, 90, 106

Reliability

Because the Revised Mosher Guilt Inventory was constructed for inclusion in an earlier volume of the Handbook reliabilities in the new format had not yet been assessed. In past research, split-half or alpha coefficients have averaged around .90 (Mosher, 1966, 1968; Mosher & Vonderheide, 1985). Since the publication of the last edition, reliability for the Sex-Guilt scale has been evaluated with a sample of 272 university students (mean age 23.38, $SD = 4.24$) and found to be .95 (Janda & Bazemore, 2011). Janda and Bazemore also propose a 10-item brief version of this 50-item scale in their 2011 publication which has been used in subsequent research (e.g., Hackathorn, Ashdown, & Rife, 2016; Hackathorn, Daniels, Ashdown, & Rife, 2017).

Validity

Mosher (1979) reviewed approximately 100 studies appearing by 1977 that consistently supported the construct validity of the Mosher Guilt Inventories. Subsequent research continued to add the construct validity of the inventory as a valid measure of guilt as a personality disposition (Green & Mosher, 1985; Kelley, 1985; Mosher & Vonderheide, 1985). In Janda and Basemore (2011), scores on the Revised Mosher Sex-Guilt Scale were correlated with never having had sex, first engaging in sex at a later age, being less satisfied with the decision to first have sex, and having fewer sexual partners.

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Exhibit

Revised Mosher Guilt Inventory

Instructions: This inventory consists of 114 items arranged in pairs of responses written by college students in response to sentence completion stems such as "When I have sexual dreams …". You are to respond to each item as honestly as you can by rating your response on a 7-point scale from 0, which means *not at all true of (for) me* to 6, which means *extremely true of (for) me*. Ratings of 1 to 5 represent ratings of agreement-disagreement that are intermediate between the extreme anchors of *not at all true* and *extremely true* for you. The items are arranged in pairs of two to permit you to compare the intensity of a *trueness* for you. This limited comparison is often useful since people frequently agree with only one item in a pair. In some instances, it may be the case that both items or neither item is true for you, but you will usually be able to distinguish between items in a pair by using different ratings from the 7-point range for each item.

Rate each of the 114 items from 0 to 6 as you keep in mind the value of comparing items within pairs. Record your answer on the machine scoreable answer sheet by filling in the blank opposite the item number with your rating from 0 to 6. Please do not omit any items; 0s must be filled in to be read by the computer.

I punish myself …

1. very infrequently.
2. when I do wrong and don't get caught.

When anger builds inside me …

3. I let people know how I feel.
4. I'm angry myself.

"Dirty" jokes in mixed company …

5. do not bother me.
6. are something that make me very uncomfortable.

Masturbation …

7. is wrong and will ruin you.
8. helps one feel eased and relaxed.

I detest myself for …

9. nothing, I love life.
10. for my sins and failures.

Sex relations before marriage …

11. should be permitted.
12. are wrong and immoral.

Sex relations before marriage …

13. ruin many a happy couple.
14. are good in my opinion.

Unusual sexual practices …

15. might be interesting.
16. don't interest me.

When I have sexual dreams …

17. I sometimes wake up feeling excited.
18. I try to forget them.

After an outburst of anger …

19. I am sorry and say so.
20. I usually feel quite a bit better.

When I was younger, fighting …

21. didn't bother me.
22. never appealed to me.

Arguments leave me feeling …

23. depressed and disgusted.
24. elated at winning.

"Dirty" jokes in mixed company …

25. are in bad taste.
26. can be funny depending on the company.

I detest myself for …

27. nothing at present.
28. being so self-centered.

When someone swears at me …

29. I swear back.
30. it usually bothers me even if I don't show it.

Petting …

31. I am sorry to say is becoming an accepted practice.
32. is an expression of affection which is satisfying.

When I was younger, fighting …

33. disgusted me.
34. was always a thrill.

Unusual sex practices …

35. are not so unusual.
36. don't interest me.

After a childhood fight, I felt …

37. good if I won, bad otherwise.
38. hurt and alarmed.

After an argument …

39. I am sorry for my actions.
40. I feel mean.

Sex …

41. is good and enjoyable.
42. should be saved for wedlock and childbearing.

After an outburst of anger …

43. I usually feel quite a bit better.
44. I feel ridiculous and sorry that I showed my emotions.

After an argument …

45. I wish that I hadn't argued.
46. I feel proud in victory, understanding in defeat.

I detest myself for …

47. nothing, I love life.
48. not being more nearly perfect.

A guilty conscience …

49. is worse than a sickness to me.
50. does not bother me too much.

"Dirty jokes" in mixed company …

51. are coarse to say the least.
52. are lots of fun.

When I have sexual desires …

53. I enjoy it like all healthy human beings.
54. I fight them for I must have complete control of my body.

After an argument …

55. I am disgusted that I allowed myself to become involved.
56. I usually feel better.

Obscene literature …

57. helps people become sexual partners.
58. should be freely published.

One should not …

59. lose his temper.
60. say "one should not."

Unusual sexual practices …

61. are unwise and lead to trouble.
62. are all in how you look at it.

Unusual sexual practices …

63. are OK as long as they're heterosexual.
64. Usually aren't pleasurable because you have preconceived feelings about their being wrong.

I regret …

65. all of my sins.
66. getting caught, but nothing else.

Sex relations before marriage …

67. in my opinion, should not be practiced.
68. are practiced too much to be wrong.

After an outburst of anger …

69. my tensions are relieved.
70. I am jittery and all keyed up.

As a child, sex play …

71. is immature and ridiculous.
72. was indulged in.

I punish myself …

73. by denying myself a privilege.
74. for very few things.

Unusual sex practices …

75. are dangerous to one's health and mental condition.
76. are the business of those who carry them out and no one else's.

Arguments leave me feeling …

77. depressed and disgusted.
78. proud, they certainly are worthwhile.

After an argument …

79. I am disgusted that I let myself become involved.
80. I feel happy if I won and still stick to my own views if I lose.

When I have sexual desires …

81. I attempt to repress them.
82. they are quite strong.

Petting …

83. is not a good practice until after marriage.
84. is justified with love.

After a childhood fight I felt …

85. as if I had done wrong.
86. like I was a hero.

Sex relations before marriage …

87. help people adjust.
88. should not be recommended.

If I robbed a bank …

89. I should get caught.
90. I would live like a king.

After an argument …

91. I am sorry and see no reason to stay mad.
92. I feel proud in victory and under-standing in defeat.

Masturbation …

93. is wrong and a sin.
94. is a normal outlet for sexual desire.

After an argument …

95. I am sorry for my actions.
96. if I have won, I feel great.

When anger builds inside me …

97. I always express it.
98. I usually take it out on myself.

After a fight, I felt …

99. relieved.
100. it should have been avoided for nothing was accomplished.

Masturbation …

101. is all right.
102. is a form of self destruction.

Unusual sex practices …

103. are awful and unthinkable.
104. are all right if both partners agree.

I detest myself for …

105. thoughts I sometimes have.
106. nothing, and only rarely dislike myself.

If I had sexual relations, I would feel …

107. all right, I think.
108. I was being used not loved.

Arguments leave me feeling …

109. exhausted.
110. satisfied usually.

Masturbation …

111. is all right.
112. should not be practiced.

After an argument …

113. it is best to apologize to clear the air.
114. I usually feel good if I won.

Negative Impact of Hookups Inventory

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The 14-item Negative Impact of Hookups Inventory (NIHI) measures negative outcomes associated with hooking up (i.e., a casual consensual sexual encounter). The questionnaire assesses negative health outcomes, emotional responses, and social consequences associated with hooking up.

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Development

The initial pool of 17 items was developed based on qualitative and quantitative research examining the negative emotional, social, and health impacts of hooking up (Campbell, 2008; Fisher et al., 2012; Owen et al., 2014;

Paul & Hayes, 2002). The items were administered to a sample of college students ($N = 607$) recruited from three college campuses. All participants reported hooking up in the three months prior to data collection. Exploratory factor analysis in a confirmatory factor analysis framework indicated that the data were sufficiently unidimensional to meet the assumptions of the Item Response Theory (IRT) analysis (RMSEA = .053, RMSR = .09, $\chi^2(119) = 319.18$, CFI = .94, ratio of the first to second eigenvalue = 5.5:1). A two-parameter IRT model was applied to the data and a single item with poor fit (based on fit plots and adjusted χ^2/df ratios) was removed from the measure. Two further items with low discrimination were also eliminated from the measure.

Response Mode and Timing

The NIHI can be completed either using paper-and-pencil or on a computer in approximately 2–4 minutes. Prior to completing the NIHI, participants are provided with the following definition of hooking up: "'Hooking up' is defined as engaging in physically intimate behaviors ranging from kissing to sexual intercourse with someone with whom you do not have a committed relationship. 'Hooking up' is defined as something both people agree to (consensual), including how far they go." Participants are presented with the list of 14 negative outcomes and asked to indicate whether they have experienced each outcome during the past three months (*Yes* or *No*).

Scoring

Item responses are scored as 0 if participants indicate not experiencing an outcome and 1 if an outcome was experienced. The 14 items are summed to create a total score (scores range from 0 to 14).

Reliability

The 14-item measure has excellent internal consistency ($\alpha = .81$) in a college student sample (Napper, Montes, Kenney, & LaBrie, 2016). Based on IRT analysis, the measure has acceptable levels of reliability and standard error of measurement. The measure is most reliable at assessing negative outcomes for those whose hooking up risk falls between the mean ($\theta = 0$; $r = .85$) and 1.5 standard deviation above the mean ($\theta = 1.5$; $r = .84$).

Validity

NIHI scores positively correlate with number of hookup partners and greater symptoms of depression, anxiety, and stress ($.24 < r\text{s} < .35$) (Napper et al., 2016). Supporting convergent and divergent validity, in a sample of 46 college students, NIHI scores positively correlate ($r = .59$) with the negative personal reactions subscale of the Social, Academic, Romantic, and Sexual Hooking Up Reaction Scale (SARS; Owen, Quirk & Fincham, 2014), but are not associated with the SARS sexual/romantic or social/academic engagement subscales (Napper et al., 2016).

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Exhibit

Negative Impact of Hookups Inventory

'Hooking up' is defined as engaging in physically intimate behaviors ranging from kissing to sexual intercourse with someone with whom you do not have a committed relationship. 'Hooking up' is defined as something both people agree to (consensual), including how far they go. Below is a list of things that sometimes happen to people either during or after hooking up. Next to each item, please select either *No* or *Yes* to indicate whether the item describes something that has happened to you *in the past 3 months during or after a hookup*.

	No	Yes
1. I have regretted that I hooked up with a particular partner.	○	○
2. I have wished that I had not gone as far sexually during a hookup.	○	○
3. I have felt ashamed after hooking up.	○	○

4.	I have felt embarrassed by things I have said or done with a hookup partner.	○	○
5.	I felt that I had been taken advantage of during a hookup.	○	○
6.	I was pressured to engage in sexual behaviors that I did not want to engage in.	○	○
7.	I have been judged or labeled negatively by others because of a hookup.	○	○
8.	I have contracted a sexually transmitted infection from a hookup.	○	○
9.	I have felt lonely after a hookup.	○	○
10.	I have worried about getting a sexually transmitted infection after a hookup.	○	○
11.	I have felt disappointed that a hookup partner has not contacted me after the hookup.	○	○
12.	I felt sexually unsatisfied or unfulfilled by a hookup experience.	○	○
13.	A hookup has caused problems with my family or friends.	○	○
14.	A hookup has negatively affected a relationship with a hookup partner.	○	○

First Coital Affective Reaction Scale

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Research on premarital coital activity has generally focused on incidence, prevalence, and changing trends, with little attention given to the affective aspects of the experience. However, affective variables are an important component of human sexual behavior. The importance of assessing affect to facilitate a better understanding of the relationship between feelings (as predictors or consequences) and sexual behaviors, attitudes, and norms has been highlighted by the findings of several researchers (Byrne, Fisher, Lamberth, & Mitchell, 1974; Schwartz, 1993; Weis, 1983). As such, the First Coital Affective Reaction Scale (FCARS) was developed to assess subjects' (male or female) reported affective reactions to their first coital experience.

In a cross-cultural study focusing on coital initiation and the circumstances surrounding the event, the FCARS was administered to a sample of 217 female undergraduates drawn from institutions in the northeast, southeast, mid-eastern, and western regions of the United States (Schwartz, 1993). As part of the same study, the scale was administered to a sample of 186 female undergraduates from institutions in the northern, middle, and southern regions of Sweden. The entire questionnaire, including the FCARS, was translated into Swedish. A complete description of the translation procedure is provided in Schwartz (1993). The FCARS has also been translated into Arabic and administered in modified version to Turkish university students (Askun & Ataca, 2007).

Development

Scales used by Byrne et al. (1974) and Weis (1983), in their assessment of affect, stimulated the development of the FCARS. The FCARS was developed as part of a cross-cultural research project comparing first coital experiences of American and Swedish women from an affective, behavioral, and attitudinal perspective (Schwartz, 1993).

Response Mode and Timing

The FCARS consists of 13 bipolar items, using a 7-point Likert format for the measurement of each item. Respondents answering "Yes" to the question "Have you ever had sexual intercourse (defined as penile–vaginal penetration)?" are asked to indicate the degree to which they had experienced the following feelings in reaction to their first coitus at the time that it occurred: confused, satisfied, anxious, guilty, romantic, pleasure, sorry, relieved, exploited, happy, embarrassed, excited, and fearful. The responses range from 1 (*not experiencing the feeling at all*) to 7 (*strongly experiencing the feeling*), with the numbers in between representing various gradations between these extremes.

To protect anonymity and allow all to participate, two versions of the scale are provided; respondents who have never engaged in sexual intercourse can complete a version asking about how they think they would feel during their first sexual intercourse (Question 3 in the Exhibit).

All respondents are asked to select the number (1 to 7) in each item that most closely represents the way they felt (or anticipate feeling). The scale takes approximately two

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minutes to complete, making it easy to include in questionnaires in which time and length are important considerations.

Scoring

Items b (satisfied), e (romantic), f (pleasure), h (relieved), j (happy), and l (excited) are reversed in scoring so that on all items 1 represents a positive response and 7 represents a negative response. Thus, greater positive FCARS affect would be represented by a lower total score and greater negative affect would be represented by a higher total score. Items may be scored and looked at separately to assess the degree to which a specific affective reaction was experienced (e.g., guilt, exploitation, pleasure, confusion, etc.).

Reliability

Internal consistency of the scale was estimated using Cronbach's alpha. The alpha coefficient with a sample of 217 female undergraduate students in the U.S. was .89 (Schwartz, 1993). With a sample of 186 female undergraduate students in Sweden (using the Swedish version of the scale), the alpha coefficient was .85. An unpublished pilot test of the research instrument used by Schwartz, with a sample of 37 female undergraduate students from a university in the New York metropolitan area, yielded an alpha coefficient of .87 for the FCARS.

Validity

For face validity, the scale was reviewed by a panel of three sexuality experts. In addition, 10 of the participants in the pilot test were individually interviewed to get their opinions regarding format, readability, clarity, and possible bias. Recommendations were incorporated into the final version of the scale. The FCARS construct validity was supported by Schwartz's (1993) findings of expected differences between the American and Swedish samples (greater negative affect among the American group) based on Christensen's (1969) theoretical assertions. These findings were also consistent with Christensen's earlier findings comparing Danish and American cultures (Christensen & Carpenter, 1962a, 1962b; Christensen & Gregg, 1970). The results of a recent study (Barnett & Moore, 2017) provided further and more current support for the construct validity of the FCARS.

Other Information

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Exhibit

First Coital Affective Reaction Scale

1. Have you ever had sexual intercourse (defined as penile–vaginal penetration)?

   ○ Yes
   ○ No

(If your answer to this question is "Yes" then complete Question 2. If your answer to this question is "No" skip Question 2 and complete Question 3.)

2. Directions: The following items deal with your feelings about your first sexual intercourse. Please try to answer as accurately and as honestly as possible. Please answer *all items* "a" through "m" by using a 7-point scale in which "1" represents not experiencing the feeling at all, and "7" represents strongly experiencing the feeling, with the numbers in-between representing various gradations between these extremes. *Please select the number in each item that most closely represents the way you felt.*

What were your reactions to your first sexual intercourse at the time that it occurred? I felt:

	1	2	3	4	5	6	7	
a) Not at all Confused	○	○	○	○	○	○	○	Very Confused
b) Not at all Satisfied	○	○	○	○	○	○	○	Very Satisfied
c) Not at all Anxious	○	○	○	○	○	○	○	Very Anxious
d) Not at all Guilty	○	○	○	○	○	○	○	Very Guilty
e) Not at all Romantic	○	○	○	○	○	○	○	Very Romantic
f) No Pleasure at all	○	○	○	○	○	○	○	Much Pleasure
g) Not at all Sorry	○	○	○	○	○	○	○	Very Sorry
h) Not at all Relieved	○	○	○	○	○	○	○	Very Relieved
i) Not al all Exploited	○	○	○	○	○	○	○	Very Exploited
j) Not at all Happy	○	○	○	○	○	○	○	Very Happy
k) Not at all Embarrassed	○	○	○	○	○	○	○	Very Embarrassed
l) Not at all Excited	○	○	○	○	○	○	○	Very Excited
m) Not at all Fearful	○	○	○	○	○	○	○	Very Fearful

3. Directions: The following items deal with your anticipated reactions to your first sexual intercourse. Please answer *all items* "a" through "m" by using a 7-point scale in which "1" represents not anticipating the feeling at all, and "7" represents strongly anticipating the feeling, with the numbers in-between representing various gradations between these extremes. *Please select the number in each item that most closely represents the way you anticipate feeling.*

What do you think your reactions will be to your first sexual intercourse at the time that it occurs? I anticipate feeling:

	1	2	3	4	5	6	7	
a) Not at all Confused	○	○	○	○	○	○	○	Very Confused
b) Not at all Satisfied	○	○	○	○	○	○	○	Very Satisfied
c) Not at all Anxious	○	○	○	○	○	○	○	Very Anxious
d) Not at all Guilty	○	○	○	○	○	○	○	Very Guilty
e) Not at all Romantic	○	○	○	○	○	○	○	Very Romantic
f) No Pleasure at all	○	○	○	○	○	○	○	Much Pleasure
g) Not at all Sorry	○	○	○	○	○	○	○	Very Sorry
h) Not at all Relieved	○	○	○	○	○	○	○	Very Relieved
i) Not at all Exploited	○	○	○	○	○	○	○	Very Exploited
j) Not at all Happy	○	○	○	○	○	○	○	Very Happy
k) Not at all Embarrassed	○	○	○	○	○	○	○	Very Embarrassed
l) Not at all Excited	○	○	○	○	○	○	○	Very Excited
m) Not at all Fearful	○	○	○	○	○	○	○	Very Fearful

The Sexual Self-Consciousness Scale

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The Sexual Self-Consciousness Scale (SSCS) aims to measure individual variability with regard to the propensity to become self-conscious in sexual situations. Self-focused attention has been found to have impeding effects on genital sexual responsiveness, presumably because it also reduces processing capacity (Meston, 2006). Experimentally induced

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self-focus was found to interact with the personality trait of sexual self-consciousness in their effect on genital arousal (Meston, 2006; van Lankveld & Bergh, 2008; van Lankveld, van den Hout, & Schouten, 2004). Subjective experience of sexual excitement was not affected in these studies. Sexual self-consciousness may thus constitute a vulnerability factor for the development of sexual dysfunction.

Development

Based on the sexological literature and on the opinion of a local panel of sexological experts, Hendriks (1997) selected 15 items to construct the SSCS. The items represented private and public aspects of self-consciousness proneness in sexual situations and of sexual anxiety and discomfort, analogous to the subscales of the Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975).

In a psychometric study (van Lankveld, Geijen, & Sykora, 2008), 282 participants between 16 and 75 years completed questionnaires. A total of 253 participants provided both demographic and SSCS data. Eighty percent of the 171 female participants (mean age = 25.6, *SD* = 7.7; range 16–58) had a steady male partner; 20 percent were single. Of 82 men (mean age = 34.1, *SD* = 11.8; range 16–70), 89 percent had a steady female partner; 11 percent were single.

In a principal components analysis on the initial 15-item questionnaire, the best-fitting solution contained two components (*Sexual Embarrassment* and *Sexual Self-Focus*) with eigenvalues > 1.

Based on this PCA, multi-trait scaling analysis (Hays & Hayashi, 1990), and subscale internal consistency, 12 items were retained. The final subscales both consisted of six items. The oblimin-rotated PCA on the final 12-item version again revealed two components, together explaining 53.7 percent of the variance. Component 1 (*Sexual Embarrassment*) explained 38.1 percent of the variance, Component 2 (*Sexual Self-Focus*) explained 15.6 percent. Normative scores of the SSCS have not yet been published.

Response Mode and Timing

Items are presented as brief descriptive statements. Participants rate their level of endorsement on a 5-point Likert-type scale. Scale interval anchors are: 0 (*strongly disagree*), 1 (*disagree a little*), 2 (*neither agree or disagree*), 3 (*agree a little*), and 4 (*strongly agree*). Completion requires less than five minutes.

Scoring

Subscales representing the *Sexual Embarrassment* and *Sexual Self-Focus* components are calculated as sum scores (see Table 1).

Reliability

The internal consistency of the current version is good for the *Sexual Embarrassment* subscale (α = .84), satisfactory for the *Sexual Self-Focus* subscale (α = .79), and good for the full 12-item scale (α = .85).

TABLE 1
Items Included on Subscales of the SSCS

Sexual Embarrassment subscale Item numbers	Sexual Self-Focus subscale Item numbers
1	2
4	3
9	5
10	6
11	7
12	8

The correlation between the two subscales in our full sample was $r = .44$, $p < .001$, which is less than their respective reliability coefficients, and is considered as solid evidence that the subscales measure distinct concepts.

Test–retest reliability after a four-week interval was satisfactory for the subscales *Sexual Embarrassment* ($r = .84$), *Sexual Self-Focus* ($r = .79$), and for the total score ($r = .79$; all ps < .001; van Lankveld et al., 2008).

Translated versions of the SSCS into Turkish and Spanish have been validated in, respectively, Turkish men ($n = 105$) and women ($n = 231$; Çelik, 2013) and in Ecuadorian women ($N = 288$; Moyano et al., 2017). The original two factor structure of the scale was well reproduced in the Turkish study using confirmatory factor analysis (CFA), and reliability indices were satisfactory (α = .84 for the full scale, α = .83 for the *Sexual Embarrassment* subscale; and α = .79 for the *Sexual Self-Focus* subscale). In Ecuadorian women, CFA showed better fit for a three factor-solution, including *Sexual Embarrassment* (Items 1, 2, 3, 4, and 5), *Sexual Partner-Focus* (Items 6, 7, 9, and 12), and *Sexual Self-Focus* (Items 8, 10, and 11).

Validity

In the original psychometric study (van Lankveld et al., 2008), 61 sexually dysfunctional participants were identified (42 women, 19 men). Sexually dysfunctional participants were older (M_{dysf} = 34.1 year; M_{func} = 26.6 year, p <.001), more often had a steady partner (93.2% for sexually dysfunctional participants; 79.7% for sexually functional participants, $p < .05$), and had longer relationships (M_{dysf} = 10.5 year; M_{func} = 6.0 year, $p < .01$).

Sexual Embarrassment and *Sexual Self-Focus* scores were significantly related to age, $F(2, 234) = 9.60$, $p < .001$. Independent main effects were found for sex, $F(2, 234) = 8.48$, $p < .001$; group, $F(2, 234) = 7.02$, $p = .001$, and partner status, $F(2, 234) = 4.11$, $p < .05$. Posthoc tests revealed that, compared with sexually functional participants, sexually dysfunctional participants scored higher on *Sexual Embarrassment,* $F(1, 235) = 10.98$, $p = .001$ and

on *Sexual Self-Focus,* $F(1, 235) = 8.97$, $p < .005$. Compared to men, women scored higher on *Sexual Embarrassment,* $F(1, 235 = 12.07$, $p = .001$, whereas women's and men's *Sexual Self-Focus* scores did not differ. Participants without a partner scored higher on *Sexual Embarrassment,* $F(1, 235) = 8.26$, $p < .005$, whereas participants with and without partner did not differ significantly on *Sexual Self-Focus*. In repeated MANCOVA in the subsample of participants with a partner ($N = 189$), with duration of the relationship added as a covariate, the main effects of group and sex were retained.

Convergent and divergent construct validity were investigated by inspecting the Pearson product-moment correlation matrix of the SSCS subscales and the putative similar construct of general self-consciousness, on the one hand, and the putative dissimilar construct of psychological distress on the other hand. For the purpose of interpretation, following Cohen (1988), we considered $r < |.15|$ as small, $|.15| < r < |.35|$ as medium, and $r > |.35|$ as large. As expected, the SSCS *Sexual Embarrassment* and *Sexual Self-Focus* subscales were both found to show medium to large-size correlations with the subscales of the general Self-Consciousness Scale (Fenigstein et al., 1975). As expected, nonsignificant or medium-size correlation coefficients ($.20 > r > .24$, $ps < .05$) were found on the SSCS *Sexual Self-Focus* subscale and the psychological distress subscales of the SCL-90; however, large-size correlations were found between SSCS *Sexual Embarrassment* and the psychological distress subscales of the SCL-90, varying between $r = .36$ (SCL-90 Somatic complaints) and $r = .49$ (SCL-90 Depression).

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Exhibit

Sexual Self-Consciousness Scale

Instructions: Every question has 5 possible answers: *Strongly Disagree* (0), *Disagree a Little* (1), *Neither Agree nor Disagree* (2), *Agree a Little* (3), and *Strongly Agree* (4). Please select the response that you feel best represents your opinion. You don't need to take much time to consider each item. However, it is important that you give the answer that best represents your opinion, not what you think your opinion should be.

	0 Strongly Disagree	1 Disagree a Little	2 Neither Agree nor Disagree	3 Agree a Little	4 Strongly Agree
1. I feel uncomfortable in sexual situations.	○	○	○	○	○
2. I often imagine how I behave during sex.	○	○	○	○	○
3. I pay much attention to my sexual thoughts and feelings.	○	○	○	○	○
4. I quickly feel embarrassed in sexual situations.	○	○	○	○	○
5. I often wonder during sex what the other person thinks of me.	○	○	○	○	○
6. I am preoccupied by the way I behave sexually.	○	○	○	○	○

7.	I am aware during sex of the impression I make on the other person.	○	○	○	○	○
8.	During sex, I pay much attention to what happens inside my body.	○	○	○	○	○
9.	I find it difficult to sexually let myself go in front of the other person.	○	○	○	○	○
10.	When I see myself during sex, I am irritatingly aware of myself.	○	○	○	○	○
11.	It takes quite some time for me to overcome my shyness in sexual situations.	○	○	○	○	○
12.	I continuously feel being observed by the other person during sex.	○	○	○	○	○

4 Arousal and Arousability

Sexual Arousability Inventory and Sexual Arousability Inventory—Expanded

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The Sexual Arousability Inventory (SAI) and the Sexuality Arousability Inventory—Expanded (SAI-E) measure sexual arousability and anxiety. The SAI is a 28-item self-report inventory measuring perceived arousability to a variety of sexual experiences. The SAI-E is the same inventory rated both on arousability and anxiety dimensions. The two dimensions are uncorrelated, providing independent information.

The SAI has clinical utility, as it is capable of discriminating between a community sample and individuals seeking therapy for sexual dysfunction (Hoon, Hoon, & Wincze, 1976). The SAI-E can help determine if a client has an arousal dysfunction problem and/or sexual anxiety, which may be inhibiting normal functioning. Furthermore, it can help pinpoint which erotic experiences may be problematic. The SAI is sensitive to therapeutic changes (e.g., Murphy, Coleman, Hoon, & Scott, 1980) and can therefore help to determine the efficacy of various therapy programs (or components thereof) for a given individual or group(s) of individuals. The SAI-E is also a valuable research tool for determining the relationship of sexual arousability and anxiety to the characteristics, attitudes, and experiences of subjects (e.g., Burgess & Krop, 1978; Coleman, Hoon, & Hoon, 1983; Hoon & Hoon, 1982) and for investigating underlying dimensions of arousability (Chambless & Lifshitz, 1984; Hoon & Hoon, 1978).

The SAI is suitable for either heterosexual or lesbian women. The SAI-E is suitable for administration to men or women regardless of sexual orientation or marital status.

Response Mode and Timing

The items are descriptions of sexual experiences and situations which are rated along a 7-point Likert-type scale on the basis of (a) how sexually aroused and (b) how anxious the respondent feels (or would feel) when engaged in the described activity.

Response options for the *Arousability* dimension include: –1 (*adversely affects arousal; unthinkable, repulsive, distracting*), 0 (*doesn't affect sexual arousal*), 1 (*possibly causes sexual arousal*), 2 (*sometimes causes sexual arousal; slightly arousing*), 3 (*usually causes sexual arousal; moderately arousing)*, 4 (*almost always sexually arousing; very arousing*), and 5 (*always causes sexual arousal; extremely arousing*).

Response choices for the *Anxiety* scale are: –1 (*relaxing, calming*), 0 (*no anxiety*), 1 (*possibly causes anxiety*), 2 (*sometimes causes anxiety; slightly anxiety producing*), 3 (*usually causes anxiety; moderately anxiety producing*), 4 (*almost always causes anxiety; very anxiety producing*), and 5 (*always causes anxiety; extremely anxiety producing*).

Participants select the number indicating their degree of arousal during each of the described activities. They then independently select the numbers indicating their perceived anxiety during each of the same activities. A card sort format may also be used for individual assessment. The inventory takes an average of 10 minutes to complete by either method. It takes less than 5 minutes to complete the 14-item version.

Scoring

The *Arousability* score is the sum of the arousability ratings (subtracting any –1s). The *Anxiety* score is a sum of anxiety ratings (subtracting –1s). For ease of interpretation, available normative data are presented in Table 1.

When frequent evaluations are desired, alternate forms of the *Arousability* scale are available. Composed of 14 items (Items 1, 2, 5, 6, 9, 10, 11, 12, 14, 15, 16, 18, 19, and 26 from

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TABLE 1
Mean Arousability and Anxiety Score on the Sexual Arousability Inventory—Expanded (SAI-E)

Group	*N*	$M_{\text{SAI-E score}}$	SD	M_{age}
		Arousability		
Heterosexual females				
Validation group	370	82.00	23.30	25.80
Undergraduates	252	78.93	24.84	18.91
Community women	90	99.14	14.27	26.26
Lesbians	371	92.34	14.37	28.20
Heterosexual males	205	90.60	14.70	25.80
		Anxiety		
Heterosexual females				
Undergraduates	252	34.34	33.14	18.91
Community women	90	6.36	16.11	26.26

Arousability and *Anxiety* scales), the shortened versions of the SAI may be used interchangeably to assess sexual arousability throughout therapy for sexual dysfunction.

Reliability

Reliability information for the *Arousability* scale from the original research (Hoon et al., 1976) follows with additional information, as noted. Cronbach alpha coefficients for the original validation ($N = 151$) and cross-validation ($N = 134$) samples were .91 and .92, respectively. Spearman-Brown corrected split-half coefficients were .92 for each sample, indicating high internal consistency. A test-retest coefficient on a subsample ($n = 48$) with an 8-week interval was .69. Split-half reliability was later confirmed by Chambless and Lifshitz (1984), who obtained a Spearman-Brown corrected coefficient of .92 utilizing a sample ($N = 252$) from another geographic location.

Cumulative percentile norms have remained remarkably consistent. The addition of a sample of women over the age of 25 to the original sample, and subsequent reanalysis of the data, did not appreciably alter the cumulative percentile distribution (M age = 28.4, revised $N = 370$). Similarly, the distributions obtained from independent samples (Chambless & Lifshitz, 1984) were remarkably similar with two minor differences. A slightly lower average *Arousability* score was obtained from the younger sample (M age = 18.91, $N = 252$) and a slightly higher average score was obtained from the older sample (M age = 26.26, $N = 90$; see Table 1).

Flax (1980) has provided reliability information on the 14-item shortened versions of the *Arousability* scale for women. In a sample of 158 White married women, half with ileostomies, she obtained Cronbach alpha coefficients of .88 and .86 for Forms A and B, respectively. Test-retest coefficients after a 3-week interval were .97 and .98 ($N = 39$) respectively.

Split-half reliability of the *Anxiety* scale was calculated on responses of 252 female undergraduates yielding an excellent corrected reliability coefficient of .94 (Chambless & Lifshitz, 1984). Test-retest data are unavailable.

Reliability information on the SAI-E and SAI for men is not available.

Validity

Construct validity of the *Arousability* scale has been demonstrated by consistently high correlations with four criterion variables: awareness of physiological changes during sexual arousal, satisfaction with sexual responsiveness, frequency of intercourse, and total episodes of intercourse before marriage (Hoon et al., 1976). Separate factor analyses of the original SAI data and a subsequent independent heterosexual female sample both resulted in five highly interpretable solutions with similar factor loadings on the respective factors (Chambless & Lifshitz, 1984). Factor analysis of SAI data obtained on a sample of lesbian women ($N = 407$) resulted in six underlying dimensions, three of which were analogous to factors found on the heterosexual samples. The other three factors were consistent with lesbian sexual practices, one differing in genitally oriented items, another representing oral sex, and the last representing nudity (Coleman et al., 1983).

Burgess and Krop (1978) found a significant correlation between SAI scores and satisfaction with intercourse frequency in heterosexual women ($N = 74$). They also found a significant positive relationship between sexual *Arousability* and heterosexual attitude and significant negative relationships with sexual anxiety and trait anxiety. Trait anxiety was not significantly related to sexual *Anxiety*, which implies that these two forms of anxiety are independent entities.

Discriminant validity has been demonstrated between normal and sexually dysfunctional women, with the mean score of the latter falling at the 5th percentile of the former (Hoon et al., 1976). Significant and theoretically interpretable response differences to specific items have been found according to sex (Hoon & Hoon, 1977), experience with cohabitation (Hoon & Hoon, 1982), orientation (Coleman et al., 1983), and distinct styles of sexual expression (Hoon & Hoon, 1978).

The initial stages of validation of the *Anxiety* scale yielded encouraging results. Validity data were collected on two samples of women by Chambless and Lifshitz (1984), who predicted the *Anxiety* scale should be negatively correlated with frequency of orgasm and with greater sexual experience. In the undergraduate sample ($N = 252$), the more sexually experienced were found to be significantly less anxious ($tau = -.14$), and in a sample of community women ($N = 90$), higher frequency of coital orgasm was significantly associated with lower anxiety ($tau = -.25$).

A principal components analysis with oblique rotation was conducted on the undergraduate responses. Three interpretable factors, accounting for 61 percent of the variance, were extracted. Factor 1 (45%) and Factor 3 (5%)

were similar in being general factors defined more by their exclusion of pornography and masturbation than by items they included. Factor 1, however, seemed more related to intercourse and foreplay, whereas Factor 3 was weighted more heavily with items concerning noncoital genital stimulation. Factor 2 (12%) concerned pornography and masturbation. These factors are similar in content to three of those on the *Arousability* scale, indicating these may be consistent dimensions of sexual stimuli. The two factors pertaining to partner sex were modestly negatively correlated with the masturbation factor.

Validity information on the SAI-E and SAI is unavailable for men.

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Exhibit

Sexual Arousability Inventory and Sexual Anxiety Inventory

The experiences in this inventory may or may not be sexually arousing to you. There are no right or wrong answers. Read each item carefully, and then select the response which indicates how sexually aroused you feel when you have the described experience, or how sexually aroused you think you would feel if you actually experienced it. Be sure to answer every time. If you aren't certain about an item, select the response than seems about right. Rate feelings of arousal according to the scale below.

	−1 Adversely affects arousal; unthinkable, repulsive, distracting	0 Doesn't affect sexual arousal	1 Possibly causes sexual arousal	2 Sometimes causes sexual arousal; slightly arousing	3 Usually causes sexual arousal; moderately arousing	4 Almost always sexually arousing; very arousing	5 Always causes sexual arousal; extremely arousing
1. When a loved one stimulates your genitals with mouth and tongue.	○	○	○	○	○	○	○
2. When a loved one fondles your breasts with his/her hands.	○	○	○	○	○	○	○
3. When you see a loved one nude.	○	○	○	○	○	○	○
4. When a loved one caresses you with his/her eyes.	○	○	○	○	○	○	○
5. When a loved one stimulates your genitals with his/her finger.	○	○	○	○	○	○	○
6. When you are touched or kissed on the inner thighs by a loved one.	○	○	○	○	○	○	○

7. When you caress a loved one's genitals with your fingers.	○	○	○	○	○	○	○
8. When you read a pornographic or "dirty" story.	○	○	○	○	○	○	○
9. When a loved one undresses you.	○	○	○	○	○	○	○
10. When you dance with a loved one.	○	○	○	○	○	○	○
11. When you have intercourse with a loved one.	○	○	○	○	○	○	○
12. When a loved one touches or kisses your nipples.	○	○	○	○	○	○	○
13. When you caress a loved one (other than genitals).	○	○	○	○	○	○	○
14. When you see pornographic pictures or slides.	○	○	○	○	○	○	○
15. When you lie in bed with a loved one.	○	○	○	○	○	○	○
16. When a loved one kisses you passionately.	○	○	○	○	○	○	○
17. When you hear sounds of pleasure during sex.	○	○	○	○	○	○	○
18. When a loved one kisses you with an exploring tongue.	○	○	○	○	○	○	○
19. When you read suggestive or pornographic poetry.	○	○	○	○	○	○	○
20. When you see a strip show.	○	○	○	○	○	○	○
21. When you stimulate your partner's genitals with your mouth and tongue.	○	○	○	○	○	○	○
22. When a loved one caresses you (other than genitals).	○	○	○	○	○	○	○
23. When you see a pornographic movie (stag film).	○	○	○	○	○	○	○
24. When you undress a loved one.	○	○	○	○	○	○	○
25. When a loved one fondles your breasts with mouth and tongue.	○	○	○	○	○	○	○
26. When you make love in a new or unusual place.	○	○	○	○	○	○	○
27. When you masturbate.	○	○	○	○	○	○	○
28. When your partner has an orgasm.	○	○	○	○	○	○	○

Now rate each of the items according to how anxious you feel when you have the described experience. The meaning of anxiety is extreme uneasiness, distress. Rate feelings of anxiety according to the scale below:

	–1 Relaxing, calming	0 No anxiety	1 Possibly causes some anxiety	2 Sometimes causes anxiety; slightly anxiety producing	3 Usually causes anxiety; moderately anxiety producing	4 Almost always causes anxiety; very anxiety producing	5 Always causes anxiety; extremely anxiety producing
1. When a loved one stimulates your genitals with mouth and tongue.	○	○	○	○	○	○	○
2. When a loved one fondles your breasts with his/her hands.	○	○	○	○	○	○	○

3. When you see a loved one nude.	○	○	○	○	○	○	○
4. When a loved one caresses you with his/her eyes.	○	○	○	○	○	○	○
5. When a loved one stimulates your genitals with his/her finger.	○	○	○	○	○	○	○
6. When you are touched or kissed on the inner thighs by a loved one.	○	○	○	○	○	○	○
7. When you caress a loved one's genitals with your fingers.	○	○	○	○	○	○	○
8. When you read a pornographic or "dirty" story.	○	○	○	○	○	○	○
9. When a loved one undresses you.	○	○	○	○	○	○	○
10. When you dance with a loved one.	○	○	○	○	○	○	○
11. When you have intercourse with a loved one.	○	○	○	○	○	○	○
12. When a loved one touches or kisses your nipples.	○	○	○	○	○	○	○
13. When you caress a loved one (other than genitals).	○	○	○	○	○	○	○
14. When you see pornographic pictures or slides.	○	○	○	○	○	○	○
15. When you lie in bed with a loved one.	○	○	○	○	○	○	○
16. When a loved one kisses you passionately.	○	○	○	○	○	○	○
17. When you hear sounds of pleasure during sex.	○	○	○	○	○	○	○
18. When a loved one kisses you with an exploring tongue.	○	○	○	○	○	○	○
19. When you read suggestive or pornographic poetry.	○	○	○	○	○	○	○
20. When you see a strip show.	○	○	○	○	○	○	○
21. When you stimulate your partner's genitals with your mouth and tongue.	○	○	○	○	○	○	○
22. When a loved one caresses you (other than genitals).	○	○	○	○	○	○	○
23. When you see a pornographic movie (stag film).	○	○	○	○	○	○	○
24. When you undress a loved one.	○	○	○	○	○	○	○
25. When a loved one fondles your breasts with mouth and tongue.	○	○	○	○	○	○	○
26. When you make love in a new or unusual place.	○	○	○	○	○	○	○
27. When you masturbate.	○	○	○	○	○	○	○
28. When your partner has an orgasm.	○	○	○	○	○	○	○

Sexual Excitation/Sexual Inhibition Inventory for Women

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The 36-item Sexual Excitation/Sexual Inhibition Inventory for Women (SESII-W) assesses the propensity for sexual excitation (SE) and sexual inhibition (SI) in women.

Development

The theoretical model underlying the SESII-W is the dual control model (DCM; Bancroft, 1999; Bancroft, Graham, Janssen, & Sanders, 2009). This model proposes that there are separate, relatively independent excitatory and inhibitory systems and that sexual arousal depends on the relative activation of SE and SI. A key assumption is that individuals vary in their propensity for both SE and SI and that inhibition of sexual response is mainly adaptive.

The Sexual Inhibition/ Sexual Excitation Scales (SIS/SES; Janssen, Vorst, Finn, & Bancroft, 2002) were developed to assess the propensity for SE and SI in men. We questioned whether this measure was equally suited for women (Graham, Sanders, Milhausen, & McBride, 2004). We obtained qualitative data from nine focus groups involving women of varying ages, race/ethnicity, and sexual orientation to explore the concepts of SE and SE (Graham et al., 2004); these data informed the item development of the SESII-W.

The original SESII-W contained 115 items. Initial validation involved a sample of 655 women (Graham, Sanders, & Milhausen, 2006). Factor analysis identified eight factors comprising a total of 36 items, and two higher-order factors, one related to SE and one to SI. The three lower-order SI factors were: *Relationship Importance* (reflecting the need for sex to occur within a specific relationship context); *Arousal Contingency* (the potential for arousal to be easily inhibited or disrupted by situational factors); and *Concerns About Sexual Function* (the tendency for worries about sexual functioning to negatively affect arousal). The SE factors were: *Sexual Arousability* (tendency to become sexually aroused in a variety of situations); *Partner Characteristics* (tendency for a partner's personality or behavior to enhance arousal); *Sexual Power Dynamics* (tendency to become sexually aroused by force or domination in a trusting sexual situation); *Smell* (tendency for olfactory cues to enhance arousal); and *Setting—Unusual or Unconcealed* (tendency for arousal to be increased by the possibility of being seen or heard having sex or having sex in a novel situation).

Confirmatory factor analyses demonstrated good support for the lower-order factor structure of both measures, although Bloemendaal and Laan (2015) noted less support for the higher-order SE and SI factors.

There are close to normal distributions for women's scores on the higher-order SE and SI factors (Bloemendaal & Laan, 2015; Graham et al., 2006; Velten et al., 2016a), supporting the idea that variation in excitation and inhibition proneness is normal, and that the mid-part of the range represents adaptive levels of inhibition.

The SESII-W can be completed by women of different sexual orientations and by women who are not in a current sexual relationship. In a sample of 974 lesbian and bisexual women, the SESII-W had properties similar to those among heterosexual women (Jozkowski, Sanders, Rhoads, Milhausen, & Graham, 2016). Bell and Reissing (2017) used the SESII-W with women ≥ 50 years.

Response Mode and Timing

The response format is a 4-point Likert-type scale, from 1 (*strongly disagree*) to 4 (*strongly agree*). Women report what would be the most typical reaction now or how they think they would respond if the item does not apply to them. Completion takes between 10–15 minutes.

Scoring

For items with positive factor loadings, responses should be coded as follows: 1 (*strongly disagree*), 2 (*disagree*), 3 (*agree*), and 4 (*strongly agree*). Three items with negative factor loadings should be coded as: 4 (*strongly disagree*), 3 (*disagree*), 2 (*agree*), and 1 (*strongly agree*). These are: Item 4 ("If it is possible someone might see or hear us having sex, it is more difficult for me to get aroused"); Item 7 ("I find it harder to get sexually aroused if other people are nearby"); and Item 27 ("If a partner is forceful during sex, it reduces my arousal").

Using the items coded as indicated above, a mean score is then generated for each of the lower-order factors. To obtain higher-order factor scores for propensities for SE and SI, a mean of the mean scores for the relevant lower-order factors is calculated. That is, SE = [sum of mean scores for *Arousability* (Items 15, 17, 19, 20, 24, 25, 26, 30, 32),

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Partner Characteristics (Items 5, 8, 10, 12), *Sexual Power Dynamics* (Items 2, 6, 27, 28), *Smell* (Items 22, 23), and *Setting* (Items 3, 4, 7, 13)] divided by 5. SI = [sum of mean scores for *Concerns about Sexual Function* (Items 9, 18, 29, 31), *Arousal Contingency* (Items 34, 35, 36), and *Relationship Importance* (Items 1, 11, 14, 16, 21, 33)] divided by 3.

Reliability

In the Graham et al. (2006) study, the lower-order factor scales had Cronbach's alphas between .63 and .80, with an average of .72. Subsequent studies have reported satisfactory to good internal consistency for the higher-order factors (Bloemendaal & Laan, 2015; Velten et al., 2016a).

Regarding test-retest reliability, for the higher-order and lower-order factors, all correlations between first and second completions were significant. The correlations for SE and SI were .81 and .82, respectively (Graham et al., 2006). Recent studies have also reported good test-retest reliability (Bloemendaal & Laan, 2015; Velten et al., 2016a).

Validity

Good evidence of construct validity has been demonstrated (Bloemendaal & Laan, 2015; Graham et al., 2006; Velten et al., 2016a). There are only modest correlations between scores on the Behavioral Inhibition/Behavioral Activation Scales (BIS/BAS; Carver & White, 1994) and the SESII-W (Bloemendaal & Laan, 2015; Graham et al., 2006; Velten et al., 2016a), suggesting that the SESII-W measures distinctly sexual rather than general inhibition/activation tendencies.

Regarding convergent validity, there are moderate positive correlations between SE and scores on the Sexual Opinion Survey (SOS; Fisher, 1998; see Bloemendaal & Laan, 2015; Graham et al., 2006; Velten et al., 2016a). For the SI factors and the SOS, studies have reported either weak (Graham et al., 2016) or strong (Bloemendaal & Laan, 2015) negative correlations. Scores on the Sexual Sensation Seeking Scale (SSSS; Kalichman & Rompa, 1995) are positively correlated with all SE factors and negatively correlated with SI factors (Graham et al., 2006; Velten et al., 2016a).

Two studies reported correlations between scores on the Female Sexual Function Index (FSFI) (Rosen et al., 2000) and the SESII-W (Bloemendaal & Laan, 2015; Velten et al., 2016a). Velten et al. (2016a) found total FSFI scores correlated negatively with SI and all associated lower-order factors, supporting an earlier finding that SI is related to sexual problems (Sanders, Graham, & Milhausen, 2008). Small positive correlations between the FSFI and SE and its subscales and positive correlations between the FSFI Arousal subscales and SE-Arousability also supports construct validity of the SESII-W (Velten et al., 2016a).

Studies have also demonstrated evidence of criterion validity. As predicted by the DCM, women who have a high propensity for SE and a low propensity for SI are more likely to engage in sexual risk-taking (Muise, Milhausen, Cole, & Graham, 2013; Turchik & Garske, 2009; Velten, Scholten, Graham, & Margraf, 2016b; Wood et al., 2013). Also consistent with the DCM are findings that women who score higher on SI (in particular, on the subscale Arousal Contingency) and score lower on SE are more likely to report sexual problems (Bloemendaal & Laan, 2015; Jozkowski et al., 2016; Sanders et al., 2008; Sarin, Amsel, & Binik, 2016; Velten et al., 2017).

In Graham et al.'s (2006) study there were no correlations between the Social Desirability Scale (Hays, Hayashi, & Stewart, 1989) and any of the SE or SI factor scores. Velten et al. (2016a), using the Balanced Inventory of Desirable Responding (Paulhus & Reid, 1991), found that some aspects of socially desirable responding might influence SE and SI; impression management correlated negatively with SE, indicating greater levels of socially desirable responding in women with lower SE.

Other Information

The SESII-W has been translated into Dutch (Bloemendaal & Laan, 2015) and German (Velten, Scholten, Graham, & Margraf, 2016a). The use of the SESII-W for research purposes is encouraged. The authors would appreciate receiving information about the results obtained with the measure.

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Exhibit

Sexual Excitation/Sexual Inhibition Inventory for Women

This questionnaire asks about things that might affect your sexual arousal. Other ways that we refer to sexual arousal are feeling "turned on," "sexually excited," and "being in a sexual mood." Women describe their sexual arousal in many different ways. These can include genital changes (being "wet," tingling sensations, feelings of warmth, etc.) as well as non-genital sensations (increased heart rate, temperature changes, skin sensitivity, etc.) or feelings (anticipation, heightened sense of awareness, feeling "sexy" or "sexual," etc.).

We are interested in what would be the most typical reaction for you now. You may read a statement that you feel does not apply to you, or may have applied to you in the past but doesn't now. In such cases please indicate how you think you would respond, if you were currently in that situation. Some of the questions sound very similar but are in fact different. Please read each statement carefully and then select the response to indicate your answer.

Don't think too long before answering. Please give your first reaction to each question.

	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
1. If I think that a partner might hurt me emotionally, I put the brakes on sexually.	○	○	○	○
2. It turns me on if my partner "talks dirty" to me during sex.	○	○	○	○
3. Having sex in a different setting than usual is a real turn-on for me.	○	○	○	○

4.	If it is possible someone might see or hear us having sex, it is more difficult for me to get aroused.	○	○	○	○
5.	Someone doing something that shows he/she is intelligent turns me on.	○	○	○	○
6.	Feeling overpowered in a sexual situation by someone I trust increases my arousal.	○	○	○	○
7.	I find it harder to get sexually aroused if other people are nearby.	○	○	○	○
8.	If I see a partner interacting well with others, I am more easily sexually aroused.	○	○	○	○
9.	If I am concerned about being a good lover, I am less likely to become aroused.	○	○	○	○
10.	Seeing a partner doing something that shows his/her talent can make me very sexually aroused.	○	○	○	○
11.	It would be hard for me to become sexually aroused with someone who is involved with another person.	○	○	○	○
12.	Eye contact with someone I find sexually attractive really turns me on.	○	○	○	○
13.	I get really turned on if I think I may get caught while having sex.	○	○	○	○
14.	If I think that I am being used sexually it completely turns me off.	○	○	○	○
15.	Seeing an attractive partner's naked body really turns me on.	○	○	○	○
16.	It is easier for me to become aroused with someone who has "relationship potential."	○	○	○	○
17.	Just being physically close with a partner is enough to turn me on.	○	○	○	○
18.	If I think about whether I will have an orgasm, it is much harder for me to become aroused.	○	○	○	○
19.	I get very turned on when someone really wants me sexually.	○	○	○	○
20.	Fantasizing about sex can quickly get me sexually excited.	○	○	○	○
21.	If I am uncertain about how my partner feels about me, it is harder for me to get aroused.	○	○	○	○
22.	Particular scents are very arousing to me.	○	○	○	○
23.	Often just how someone smells can be a turn-on.	○	○	○	○
24.	When I think about someone I find sexually attractive, I easily become sexually aroused.	○	○	○	○
25.	With a new partner I am easily aroused.	○	○	○	○
26.	If I see someone dressed in a sexy way, I easily become sexually aroused.	○	○	○	○
27.	If a partner is forceful during sex, it reduces my arousal.	○	○	○	○
28.	Dominating my partner sexually is arousing to me.	○	○	○	○
29.	Sometimes I feel so "shy" or self-conscious during sex that I cannot become fully aroused.	○	○	○	○
30.	Certain hormonal changes definitely increase my sexual arousal.	○	○	○	○
31.	If I am worried about taking too long to become aroused, this can interfere with my arousal.	○	○	○	○
32.	Sometimes I am so attracted to someone, I cannot stop myself from becoming sexually aroused.	○	○	○	○
33.	I really need to trust a partner to become fully aroused.	○	○	○	○
34.	It is difficult for me to stay sexually aroused.	○	○	○	○
35.	When I am sexually aroused the slightest thing can turn me off.	○	○	○	○
36.	Unless things are "just right" it is difficult for me to become sexually aroused.	○	○	○	○

The Sexual Inhibition/Sexual Excitation Scales

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The Sexual Inhibition/Sexual Excitation scales (SIS/SES) measure a person's propensity for sexual inhibition and excitation. The underlying theoretical model postulates that sexual response and associated behaviors depend on dual control mechanisms, involving excitatory and inhibitory neurophysiological systems (Bancroft & Janssen, 2000). Sexual inhibition and excitation, as measured by these scales, have been found to be predictive of sexual desire, sexual arousal, sexual functioning, sexual risk taking, sexual compulsivity, hypersexuality, asexuality, sexual aggression, sexual infidelity, and the effects of negative mood on sexuality (cf. Bancroft, Graham, Janssen, & Sanders, 2009; Janssen & Bancroft, 2007).

Development

The SIS/SES was initially developed for men (Janssen, Vorst, Finn, & Bancroft, 2002a, 2002b) but has been validated for use in both male and female samples. A facet design approach was used to guide scale development (e.g., Shye & Elizur, 1994). The majority of items were written in an "if–then" form. A variety of facets are covered, including type of stimulus (e.g., social, imaginary, visual, tactile) and type of response (sexual arousal or genital response). Inhibition is conceptualized to play a specific role in the modification of sexual responses in the avoidance or reduction of threat. Threats can be intrapersonal or interpersonal in nature and can involve, for example, norms and values, and physical and psychological harm.

Factor analysis on the data from a sample of 408 sexually functional, heterosexual men (mean age: 23 years) identified 10 factors (Janssen et al., 2002a). A further factor analysis of the subscale scores identified a single excitation factor (SES) but differentiated sexual inhibition into two factors: *Inhibition due to threat of performance failure* (SIS1) and *Inhibition due to the threat of performance consequences* (SIS2). SES consists of 20 items and four subscales, SIS1 consists of 14 items and three subscales, and SIS2 consists of 11 items and three subscales. The factor loadings were between .6 and .9 and the three factors together accounted for 60 percent of the variance. Multigroup confirmatory factor analyses on the data from a second sample of 459 men (mean age: 21 years) and a third sample of 313 men (mean age: 46 years) further supported the use of the higher-level factor structure. The three scales showed close to normal distributions in all three samples. SES and SIS1 were related to age (e.g., $r = -.24$ and .34, respectively, in the third sample). In addition, correlations between SES and the two inhibition factors were low (e.g., SES–SIS1: $r = -.07$; SES–SIS2: $r = -.11$ in the first sample), suggesting that sexual excitation and inhibition are relatively independent. A significant but modest correlation ($r = .28$, first sample) revealed limited overlap between the two inhibition scales.

Carpenter, Janssen, Graham, Vorst, and Wicherts (2008) compared 978 men (mean age: 20 years) with 1,067 heterosexual women (mean age: 19 years), and confirmatory factor analysis suggested an acceptable fit of the three-factor structure in women.

Response Mode and Timing

Respondents are asked to indicate what their "most likely reaction" would be to a series of statements and to provide a rating on a 4-point scale from 1 (*strongly agree*) to 4 (*strongly disagree*) to a total of 45 questions. Completion of the questionnaire takes approximately 10 minutes.

Scoring

To compute scores, all but two (Items 17 and 45) of the items first need to be reversed (1 = 4, 2 = 3, 3 = 2, 4 = 1). Missing values can be replaced with the mean of the other items making up the lower-level factor to which the missing item belongs. It is recommended that no scores be computed if more than 10 out of the 45 items are missing, and that no scores be calculated for SES if more than five SES items are missing, for SIS1 if more than four SIS1 items are missing, and for SIS2 if more than three SIS2 items are missing. See Table 1 for items and corresponding factors.

Reliability

Cronbach alpha scores for the first three male samples (Janssen et al., 2002a) were .89, .89, and .88 for SES; .81,

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TABLE 1
SIS–SES Items and Corresponding Factors

SES		SIS1		SIS2	
Lower-level factor	**Item number**	**Lower-level factor**	**Item number**	**Lower-level factor**	**Item number**
SES_2	1	SIS1_1	5	SIS2_3	2
SES_2	3	SIS1_1	9	SIS2_2	8
SES_4	4	SIS1_1	10	SIS2_1	12
SES_1	6	SIS1_2	17 no recode	SIS2_3	15
SES_1	7	SIS1_1	19	SIS2_2	18
SES_3	11	SIS1_3	20	SIS2_1	22
SES_1	13	SIS1_2	21	SIS2_1	24
SES_1	14	SIS1_1	23	SIS2_2	27
SES_1	16	SIS1_3	33	SIS2_1	28
SES_3	25	SIS1_1	36	SIS2_3	31
SES_4	26	SIS1_1	40	SIS2_3	34
SES_2	29	SIS1_1	41		
SES_1	30	SIS1_3	42		
SES_4	32	SIS1_2	45 no recode		
SES_1	35				
SES_3	37				
SES_2	38				
SES_1	39				
SES_3	43				
SES_1	44				

.78, and .83 for SIS1; and .73, .69, and .75 for SIS2. For women (Carpenter et al., 2008), the corresponding alphas were .87, .76, and .70. A sample of 50 men (Janssen et al., 2002a) and 51 women (Carpenter et al., 2008) completed the SIS/SES questionnaire on two occasions. The average number of weeks between sessions was seven for men and a little under five for women. Test-retest correlations were .76 (SES), .67 (SIS1), and .74 (SIS2) for men, and .70 (SES), .68 (SIS1), and .60 (SIS2, after removal of two outliers) for women.

Validity

In evaluating the scales' discriminant and convergent validity (see Carpenter et al., 2008 and Janssen et al., 2002a), we found a small degree of overlap with measures of traits of behavioral inhibition, neuroticism, harm avoidance, and reward responsivity, suggesting that the SES scale is related to aspects of reward responsivity and the SIS scales (especially SIS2) tap aspects of behavioral inhibition (see Table 2); however, the limited degree of overlap supports the idea that the SIS/SES questionnaire predominantly measures propensities that are specific to sexual responsivity. For more information on validity, including associations with sexual functioning and sexual risk taking, see Bancroft et al. (2009) and Janssen and Bancroft (2007).

Other Information

The SIS/SES has been translated into a number of languages, including Dutch (e.g., van Lankveld, Platteau, van Montfort, Nieuwenhuijs, & Syroit, 2015), Finnish (Varjonen et al., 2007), French (Nolet, Rouleau, Benbouriche, Carrier Emond, & Renaud, 2015), Italian (Panzeri et al., 2008), Polish (Kowalczyk, Nowosielski, Kurpisz, Lew-Starowicz, & Samochowiec, 2017), Portuguese (Quinta Gomes, Janssen, Santos-Iglesias, Pinto-Gouveia, Fonseca, & Nobre, 2018), and Spanish (Granados, Salinas, & Sierra, 2018). Also, using a *linguistic validation* approach, conceptually equivalent scales have been created in five South-Asian languages (Hindi, Urdu, Panjabi, Tamil, and Sinhalese; Malavige et al., 2013). The relative independence of sexual inhibition and excitation, associations with other sexual and nonsexual measures (e.g., BIS/BAS, cf. Granados et al., 2018; van Lankveld et al., 2015), and the general factor structure have been replicated by, among others, Oliveira Lucas et al. (2010), Panzeri et al. (2008), and Varjonen et al. (2007).

The SIS/SES and additional information, including an SPSS file for scoring, can be found online at www.indiana.edu/~sexlab/sisses.html. There are no fees attached to its use. A short, gender invariant (14-item) version is also available (The Sexual Inhibition/Sexual Excitation Scales—Short Form, next entry).

TABLE 2
Correlations of SES, SIS1, and SIS2 with Other Measures

	SES		SIS1		SIS2	
	Women	**Men**	**Women**	**Men**	**Women**	**Men**
Social Desirability Scale (SDSR-5)	–.23	.02	–.18	–.11	–.01	.17**
Behavioral Inhibition/Activation Scales						
BIS	.16	.23**	–.01	.13	.16	.21**
BAS-Reward Responsiveness	.11	.37**	–.19	–.12**	–.08	–.01
BAS-Drive	.15	.25**	.06	–.01	–.09	–.07
BAS-Fun Seeking	.27**	.25**	–.19	–.18	–.31**	–.17**
Eysenck Personality Questionnaire (EPQ)						
Neuroticism	.16	.22**	.18	.20**	.07	–.09
Extraversion	.03	–.01	–.20	–.14**	–.12	–.10
Harm Avoidance Subscale (MPQ)	–.10	–.05	–.08	.19**	.23	.26**
Sexual Opinion Survey (SOS)	.58**	.42**	–.08	–.10	–.33**	–.28**
Sociosexual Orientation Inventory (SOI)	.38**	.20**	–.12	.08	–.47**	–.33**

Note. For women, $N = 141$ for all measures except SDSR-5 ($N = 1{,}040$). For men, $N = 531$ for all measures except SDSR-5 ($N = 971$). Table taken from Carpenter et al. (2008). **$p < .01$; Holm's sequential Bonferroni procedure

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Exhibit

Sexual Inhibition/Sexual Excitation Scales

Note to researchers: When different item versions are used for men and women, both versions are given (male/female).

Instructions: In this questionnaire you will find statements about how you might react to various sexual situations, activities, or behaviors. Obviously, how you react will often depend on the circumstances, but we are interested in what would be the most likely

reaction for you. Please read each statement carefully and decide how you would be most likely to react. Then select the response that corresponds with your answer. Please try to respond to every statement. Sometimes you may feel that none of the responses seems completely accurate. Sometimes you may read a statement which you feel is "not applicable." In these cases, please select the response which you would choose if it were applicable to you. In many statements you will find words describing reactions such as "sexually aroused," or sometimes just "aroused." With these words we mean to describe "feelings of sexual excitement," feeling "sexually stimulated," "horny," "hot," or "turned on." Don't think too long before answering; please give your first reaction. Try not to skip any questions. Try to be as honest as possible.

	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
1. When I look at erotic pictures, I easily become sexually aroused.	○	○	○	○
2. If I feel that I am being rushed, I am unlikely to get very aroused.	○	○	○	○
3. If I am on my own watching a sexual scene in a film, I quickly become sexually aroused.	○	○	○	○
4. Sometimes I become sexually aroused just by lying in the sun/Sometimes just lying in the sun sexually arouses me.	○	○	○	○
5. Putting on a condom can cause me to lose my erection/Using condoms or other safe-sex products can cause me to lose my arousal.	○	○	○	○
6. When a sexually attractive stranger accidentally touches me, I easily become aroused.	○	○	○	○
7. When I have a quiet candlelight dinner with someone I find sexually attractive, I get aroused.	○	○	○	○
8. If there is a risk of unwanted pregnancy, I am unlikely to get sexually aroused.	○	○	○	○
9. I need my penis to be touched to maintain an erection/I need my clitoris to be stimulated to continue feeling aroused.	○	○	○	○
10. When I am having sex, I have to focus on my own sexual feelings in order to keep my erection/stay aroused.	○	○	○	○
11. When I feel sexually aroused, I usually have an erection/I usually have a genital response (e.g., vaginal lubrication, being wet).	○	○	○	○
12. If I am having sex in a secluded, outdoor place and I think that someone is nearby, I am not likely to get very aroused.	○	○	○	○
13. When I see someone I find attractive dressed in a sexy way, I easily become sexually aroused.	○	○	○	○
14. When I think someone sexually attractive wants to have sex with me, I quickly become sexually aroused.	○	○	○	○
15. If I discovered that someone I find sexually attractive is too young, I would have difficulty getting sexually aroused with him/her.	○	○	○	○
16. When I talk to someone on the telephone who has a sexy voice, I become sexually aroused.	○	○	○	○
17. When I notice that my partner is sexually aroused, my own arousal becomes stronger.	○	○	○	○
18. If my new sexual partner does not want to use a condom, I am unlikely to stay aroused/If my new sexual partner does not want to use a condom/safe-sex product, I am unlikely to stay aroused.	○	○	○	○
19. I cannot get aroused unless I focus exclusively on sexual stimulation.	○	○	○	○
20. If I feel that I'm expected to respond sexually, I have difficulty getting aroused.	○	○	○	○
21. If I am concerned about pleasing my partner sexually, I easily lose my erection/If I am concerned about pleasing my partner sexually, it interferes with my arousal.	○	○	○	○
22. If I am masturbating on my own and I realize that someone is likely to come into the room at any moment, I will lose my erection/my sexual arousal.	○	○	○	○
23. It is difficult to become sexually aroused unless I fantasize about a very arousing situation.	○	○	○	○
24. If I can be heard by others while having sex, I am unlikely to stay sexually aroused.	○	○	○	○
25. Just thinking about a sexual encounter I have had is enough to turn me on sexually.	○	○	○	○
26. When I am taking a shower or a bath, I easily become sexually aroused.	○	○	○	○

27.	If I realize there is a risk of catching a sexually transmitted disease, I am unlikely to stay sexually aroused.	○	○	○	○
28.	If I can be seen by others while having sex, I am unlikely to stay sexually aroused.	○	○	○	○
29.	If I am with a group of people watching an X-rated film, I quickly become sexually aroused.	○	○	○	○
30.	When a sexually attractive stranger looks me straight in the eye, I become aroused/When a sexually attractive stranger makes eye-contact with me, I become aroused.	○	○	○	○
31.	If I think that having sex will cause me pain, I will lose my erection/my arousal.	○	○	○	○
32.	When I wear something I feel attractive in, I am likely to become sexually aroused.	○	○	○	○
33.	If I think that I might not get an erection, then I am less likely to get one/If I am worried about being too dry, I am less likely to get lubricated.	○	○	○	○
34.	If having sex will cause my partner pain, I am unlikely to stay sexually aroused.	○	○	○	○
35.	When I think of a very attractive person, I easily become sexually aroused.	○	○	○	○
36.	Once I have an erection, I want to start intercourse right away before I lose my erection/Once I am sexually aroused, I want to start intercourse right away before I lose my arousal.	○	○	○	○
37.	When I start fantasizing about sex, I quickly become sexually aroused.	○	○	○	○
38.	When I see others engaged in sexual activities, I feel like having sex myself.	○	○	○	○
39.	When I see an attractive person, I start fantasizing about having sex with him/her.	○	○	○	○
40.	When I have a distracting thought, I easily lose my erection/my arousal.	○	○	○	○
41.	I often rely on fantasies to help me maintain an erection/my sexual arousal.	○	○	○	○
42.	If I am distracted by hearing music, television, or a conversation, I am unlikely to stay aroused.	○	○	○	○
43.	When I feel interested in sex, I usually get an erection/I usually have a genital response (e.g., vaginal lubrication, being wet).	○	○	○	○
44.	When an attractive person flirts with me, I easily become sexually aroused.	○	○	○	○
45.	During sex, pleasing my partner sexually makes me more aroused.	○	○	○	○

The Sexual Inhibition/Sexual Excitation Scales—Short Form

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The central assumption of the Dual Control Model (Bancroft & Janssen, 2000) is that sexual arousal and related processes result from a balance between inhibitory and excitatory mechanisms. The Sexual Inhibition/Sexual Excitation Scales (SIS/SES; Janssen, Vorst, Finn & Bancroft, 2002) consist of 45 items and feature one higher-level excitation factor (SES) and two higher-level inhibition factors: one relevant to the threat of performance failure (SIS1) and one relevant to the threat of performance consequences (SIS2). A substantial number of studies have shown that the

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SIS/SES is relevant to the prediction of various aspects of sexual response and behavior (cf. Bancroft, Graham, Janssen, & Sanders, 2009; Janssen & Bancroft, 2007). Several studies have reported gender differences in SIS/SES scores. Women tend to score higher on sexual inhibition and lower on sexual excitation as compared to men. Also, not all SIS/SES items may be equally relevant to men's and women's arousal (Carpenter, Janssen, Graham, Vorst, & Wicherts, 2008). The gender-invariant SIS/SES-Short Form (SIS/SES-SF) was created by selecting items that represent the higher-level three-factor structure equally well for women and men.

Development

A total of 2,045 Indiana University undergraduates (1,067 women and 978 men; mean age = 19.8) completed the 45-item SIS/SES. A series of confirmatory factor analyses using LISREL revealed a three-factor solution, involving 19 items, with equal factor loadings for women and men. Some of these items had different measurement characteristics for women and men, as evidenced by differences in item intercepts and residual variances (Meredith, 1993). Therefore, only items that were fully "measurement invariant" for men and women were selected. This procedure yielded a final, 14-item solution that highlights SIS/SES themes of shared relevance to men and women. Shared SES themes included sexual arousal stemming from social interactions. SIS1 themes for both women and men included distraction, focus on sexual performance, and past problems with arousal. SIS1 themes of greater relevance to men, including concerns about pleasing one's partner sexually, were excluded. For both men and women, SIS2 themes included risk of getting caught or contracting an STD. SIS2 themes more relevant to women, including those related to pregnancy, were excluded. Men scored higher on SES (M = 17.1, SD = 2.8), lower on SIS1 (M = 8.2, SD = 1.9), and lower on SIS2 (M = 10.5, SD = 2.1) than women (M = 15.0, SD = 2.8; M = 8.7, SD = 1.8; M = 12.0, SD = 2.3, respectively; for all, ps < .001). Correlations between the 45-item SIS/SES and the 14-item Short Form were identical for men and women for SES (r = .90), SIS1 (r = .80), and SIS2 (r = .80).

Response Mode and Timing

The SIS/SES-SF consists of 14 items rated on a 4-point scale from 1 (*strongly agree*) to 4 (*strongly disagree*). Completion of the questionnaire takes approximately 3–5 minutes. General instructions are provided.

Scoring

To score the SIS/SES-SF: first, recode all items so that 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree* (i.e., 1 = 4, 2 = 3, 3 = 2, 4 = 1). Then, add responses to Items 1, 3, 8, 10, 11, and 14 for SES; add responses to Items 4, 9, 12, and 13 for SIS1; and add responses to Items 2, 5, 6, and 7 for SIS2. This scheme will result in scores with a range of 6–24 for SES, and 4–16 for SIS1 and SIS2. Missing data can be handled by substituting the mean score for remaining items from that subscale, but discarding incomplete data is preferable.

Reliability

A subset of our participants (50 men and 51 women) completed the SIS/SES-SF on two occasions, at an average interim of 32 days for women and 48 days for men. After removal of three outliers, for women the test-retest reliability of the SIS/SES-SF was r = .61 for SES, r = .61 for SIS1, and r = .63 for SIS2. For men, test-retest reliability of the Short Form was r = .75 for SES, r = .66 for SIS1, and r = .65 for SIS2.

Validity

A subset of participants (141 women and 532 men) completed, in addition to the SIS/SES-SF, the Neuroticism and Extraversion/Introversion Scales of the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975), the Harm Avoidance Scale of the Minnesota Personality Questionnaire (Tellegen & Waller, 2008), the Social Desirability Scale (Hays, Hayashi & Stewart, 1989), the Behavioral Inhibition/Behavioral Activation Scales (Carver & White, 1994), the Sexual Opinion Survey (Fisher, Byrne, White & Kelley, 1988), and the Sociosexual Orientation Inventory (Simpson & Gangestad, 1991). The findings suggested that the convergent and discriminant validity of the SIS/SES–SF resembles that of the 45-item measure (see Table 1).

Additional Information

Similar to the original and longer SIS/SES, the SIS/SES-SF has been translated into a number of other languages and has been validated in, for example, Germany (Turner, Briken, Klein, & Rettenberger, 2014) and Spain (Moyano & Sierra, 2014). In addition, the Dutch version of the SIS/SES-SF has been used in a representative sample of men and women in Flanders (N = 1,825; Pinxten & Lievens, 2014). Sexual excitation scores were close to normally distributed. The distribution for SIS1 was slightly skewed toward lower scores in both men and women, and for SIS2 it was slightly skewed toward higher scores, but only in women.

In addition to the SIS/SES-SF, three other measures exist that can be used to measure individual differences in sexual excitation and inhibition, including the

TABLE 1
Correlations of SIS/SES—Short Form Subscales with Other Measures

	SES		SIS1		SIS2	
	Women	Men	Women	Men	Women	Men
Social Desirability Scale (SDSR-5)	–.23	–.05	–.08	–.06	–.04	.10
Behavioral Inhibition/Activation Scales						
BIS	.13	.25**	–.03	.20**	.13	.28**
BAS-Reward Responsiveness	.04	.35**	–.26	–.05	–.10	–.02
BAS-Drive	.14	.24**	.06	–.01	–.06	–.03
BAS-Fun Seeking	.26	.25**	–.23	–.14	–.27	–.16**
Eysenck Personality Questionnaire (EPQ)						
Neuroticism	.18	.21**	.19	.23**	.08	.15**
Extraversion	.04	–.01	–.24	–.10	–.13	–.13
Harm Avoidance Subscale (MPQ)	–.10	–.04	–.04	.20**	.21	.27**
Sexual Opinion Survey (SOS)	.52**	.39**	–.20	–.13	–.31**	–.28**
Sociosexual Orientation Inventory (SOI)	.36**	.26**	–.22	.07	–.36**	–.29**

Note. Holm's sequential Bonferroni procedure was used (Holm, 1979).
**$p < .01$

original, full-length SIS/SES, (Janssen et al., 2002; Carpenter et al., 2008), the Sexual Excitation/Sexual Inhibition Inventory for Women (SESII-W; Graham, Sanders, & Milhausen, 2006), and the Sexual Excitation/Sexual Inhibition Inventory for Women and Men (SESII-W/M; Milhausen, Graham, Sanders, Yarber, & Maitland, 2010). Findings from these and related studies (e.g., Graham, Sanders, Milhausen, & McBride, 2004; Janssen, McBride, Yarber, Hill, & Butler, 2008) suggest that while gender differences may exist in factors that influence sexual excitation and inhibition, many central themes are shared. The SIS/SES-SF focuses on items with similar psychometric properties in women and men and currently is the only measure of sexual excitation and inhibition for which measurement invariance by gender has been established.

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Exhibit

The Sexual Inhibition/Sexual Excitation Scales (SIS/SES)—Short Form

Note to researchers: When different item versions are used for men and women, both versions are given (male/female).

Instructions: In this questionnaire you will find statements about how you might react to various sexual situations, activities, or behaviors. Obviously, how you react will often depend on the circumstances, but we are interested in what would be the most likely reaction for you. Please read each statement carefully and decide how you would be most likely to react. Then select the response that corresponds with your answer. Please try to respond to every statement. Sometimes you may feel that none of the responses seems completely accurate. Sometimes you may read a statement that you feel is "not applicable." In these cases, please select the response you would choose if it were applicable to you. In many statements you will find words describing reactions such as "sexually aroused," or sometimes just "aroused." With these words we mean to describe "feelings of sexual excitement," feeling "sexually stimulated," "horny," "hot," or "turned on." Don't think too long before answering. Please give your first reaction. Try to not skip any questions. Try to be as honest as possible.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. When a sexually attractive stranger accidentally touches me, I easily become aroused.	○	○	○	○
2. If I am having sex in a secluded, outdoor place and I think that someone is nearby, I am not likely to get very aroused.	○	○	○	○
3. When I talk to someone on the telephone who has a sexy voice, I become sexually aroused.	○	○	○	○
4. I cannot get aroused unless I focus exclusively on sexual stimulation.	○	○	○	○
5. If I am masturbating on my own and I realize that someone is likely to come into the room at any moment, I will lose my erection/my sexual arousal.	○	○	○	○
6. If I realize there is a risk of catching a sexually transmitted disease, I am unlikely to stay sexually aroused.	○	○	○	○
7. If I can be seen by others while having sex, I am unlikely to stay sexually aroused.	○	○	○	○
8. When I think of a very attractive person, I easily become sexually aroused.	○	○	○	○
9. Once I have an erection, I want to start intercourse right away before I lose my erection/Once I am sexually aroused, I want to start intercourse right away before I lose my arousal.	○	○	○	○
10. When I start fantasizing about sex, I quickly become sexually aroused.	○	○	○	○
11. When I see others engaged in sexual activities, I feel like having sex myself.	○	○	○	○
12. When I have a distracting thought, I easily lose my erection/my arousal.	○	○	○	○
13. If I am distracted by hearing music, television, or a conversation, I am unlikely to stay aroused.	○	○	○	○
14. When an attractive person flirts with me, I easily become sexually aroused.	○	○	○	○

Sexual Excitation/Sexual Inhibition Inventory for Women and Men

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The Sexual Excitation/Sexual Inhibition Inventory for Women and Men (SESII-W/M) was developed to assess propensity for sexual excitation (SE) and sexual inhibition (SI) in response to a broad range of stimuli and sexual situations in both women and men.

Development

The theoretical model underlying the SESII-W/M is the Dual Control Model of sexual response (Bancroft, 1999; Bancroft, Graham, Janssen, & Sanders, 2009; Bancroft & Janssen, 2000). The model suggests that sexual arousal depends upon the relative activation of SE and SI, separate and independent systems (Bancroft, 1999; Bancroft & Janssen, 2000).

Two questionnaires assessing propensity for SE and SI were developed prior to the SESII-W/M. The Sexual Inhibition/Sexual Excitation Scales (SIS/SES; Janssen, Vorst, Finn, & Bancroft, 2002) were developed for men; however, because the SIS/SES was thought to lack factors that could be particularly important to women's sexual arousal, the Sexual Excitation/Sexual Inhibition Inventory for Women (SESII-W; Graham, Sanders, & Milhausen, 2006) was developed based on qualitative data from focus groups of women (Graham, Sanders, Milhausen, & McBride, 2004). Many of the issues raised by women in the focus groups seemed also relevant for men's arousal (e.g., self-esteem, negative mood, emotional connection to a partner, context for sexual encounter). Indeed, results from a focus group study of men suggest that these factors can facilitate or interfere with men's sexual arousal (Janssen, McBride, Yarber, Hill, & Butler, 2008).

Exploratory factor analysis (EFA) was conducted on the original SESII-W items, using a sample of 530 undergraduate and graduate men and women randomly selected from a list of 4,000 students attending a large, midwestern university in the United States (Milhausen, Graham, Sanders, Yarber, & Maitland, 2010). EFA identified eight factors, but two factors comprised only two items and were thus removed from the confirmatory factor analysis (CFA) model. The final six-factor solution includes the following: *Inhibitory Cognitions* (the potential for arousal to be disrupted by worries or negative thoughts about sexual functioning and performance), *Relationship Importance* (reflecting the need for sex to occur within a specific relationship context), *Arousability* (the tendency to become sexually aroused in a variety of situations), *Partner Characteristics and Behaviors* (the tendency for a partner's personality or behavior to enhance arousal), *Setting* (Unusual or Unconcealed; the tendency for arousal to be increased by the possibility of being seen or heard having sex or having sex in a novel situation), and *Dyadic Elements of the Sexual Interaction* (the tendency for negative partner dynamics during the sexual interaction to inhibit sexual arousal). Twenty of the 30 items on the SESII-W/M are also found on the SESII-W (Graham et al., 2006), and five of the factors (*Inhibitory Cognitions, Relationship Importance, Arousability, Partner Characteristics and Behaviors*, and *Setting* [Unusual/Unconcealed]) are highly similar to factors on the SESII-W.

In the validation study, men's and women's scores on the subscales were significantly different at $p < .001$ (Milhausen et al., 2010); effect sizes were moderate and very large (Hyde, 2005). Women scored higher on *Inhibitory Cognitions, Relationship Importance, Partner Characteristics and Behaviors*, and *Dyadic Elements of the Sexual Interaction*. Men scored higher on *Arousability* and *Setting* (Unusual or Unconcealed; Milhausen et al., 2010).

The questionnaire is appropriate for use with women and men of different sexual orientations and varying degrees of sexual experience and can be completed by persons who are not in a current sexual relationship.

Response Mode and Timing

The response format is a 4-point, Likert-type rating scale, from 1 (*strongly disagree*) to 4 (*strongly agree*). For full instructions, see the Exhibit. Items should be scrambled so that items on the same subscale do not appear together. The questionnaire typically takes between 10 and 15 minutes to complete.

Scoring

Using the items coded as indicated above, a mean score is then generated for each of the subscales. In the Exhibit, Items 1 to 8 represent the *Inhibitory Conditions* subscale, Items 9 to 13 represent the *Relationship Importance* subscale, Items 14 to 18 represent the *Arousability* subscale, Items 19 to 23 represent the *Partner Characteristics and Behaviors* subscale, Items 24 to 27 represent the *Setting*

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subscale, and Items 28 to 30 represent the *Dyadic Elements of the Sexual Interaction* subscale. Three items should be reverse coded: If I am very sexually attracted to someone, I don't need to be in a relationship with that person to become sexually aroused (*Relationship Importance*); If it is possible someone might see or hear us having sex, it is more difficult for me to get aroused (*Setting*); and I find it harder to get sexually aroused if other people are nearby (*Setting*).

Reliability

Reliability and validity were assessed with a sample of undergraduate and graduate students at a large, midwestern university in the United States (Study 1; $N = 481$) and men and women recruited from distance education classes at a Canadian university (Study 2; $N = 149$; Milhausen et al., 2010). In Study 1, the subscales had Cronbach's alphas ranging from .66 to .78. Study 2 assessed the test-retest reliability with a subsample of 81 participants. Correlations for subscales ranged from .66 to .82, with a mean correlation of .76. All correlations were significant at the $p < .005$ level.

In a sample of young African American women aged 14–20, the *Arousability* subscale was used and yielded a Cronbach's alpha of .73 (Swartzendurber et al., 2015). When adapted for a sample of Portuguese men and women, subscales yielded Cronbach's alphas ranging between .52 and .80 (Neves, Milhausen, & Carvalheira, 2016).

Validity

In Milhausen et al. (2010), convergent and discriminant validity was demonstrated, and the pattern of correlations generally matched those found with the SESII-W (Graham et al., 2006). Most correlations between the SESII-W/M factors and the Behavioral Inhibition/Behavioral Activation Scales (BIS/BAS; Carver & White, 1994), the Sexual Opinion Survey (SOS; Fisher, 1998) and the Sexual Sensation Seeking Scale (SSSS; Kalichman & Rompa, 1995) were low to moderate and in the expected direction. No correlation was found between the Social Desirability Scale (SDSR; Hays, Hayashi, & Stewart, 1989) and any of the SESII-W/M scales (Milhausen et al., 2010).

In Swartzendurber et al. (2015), higher *Arousability* was associated with lower partner communication among young African American women. In the Portuguese sample, SESII-W/M scores and the SOS (Fisher, 1998) and the Revised Sexual Sensation Seeking Scale (RSSSS; Kalichman, 2011) scores were negatively correlated, as predicted (Neves et al., 2016).

Other Information

The SESII-W/M will likely be a useful measure in investigations in which propensity for sexual inhibition and excitation in response to specific situations or stimuli must be measured identically for men and women. Researchers are encouraged to use the SESII-W/M for this purpose. The authors would appreciate receiving information about the results obtained with the measure.

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Exhibit

Sexual Excitation/Sexual Inhibition Inventory for Women and Men

The next set of items asks about things that might affect your sexual arousal. Other ways that we refer to sexual arousal are feeling "turned on," "sexually excited," and "being in a sexual mood." Men and women describe their sexual arousal in terms of genital changes (being "hard," being "wet," tingling sensations, feelings of warmth, etc.). Men and women also mention non-genital sensations (increased heart rate, temperature changes, skin sensitivity, etc.) or feelings (anticipation, feeling "open," etc.).

We are interested in what would be the most typical reaction for you now. You might read a statement that you feel is not applicable to you, or a statement that refers to a situation that may have occurred in the past but is not likely to occur now. In such cases please indicate how you think you would respond, if you were in that situation. Some of the questions sound very similar, but are different; please read each question carefully and then mark the response which indicates your answer. Don't think too long before answering. Please give your first reaction to each question.

	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
1. Sometimes I have so many worries that I am unable to get aroused.	○	○	○	○
2. If I feel that I am expected to respond sexually, I have difficulty getting aroused.	○	○	○	○
3. Sometimes I feel so "shy" or self-conscious during sex that I cannot become fully aroused.	○	○	○	○
4. If I think about whether I will have an orgasm, it is much harder for me to become aroused.	○	○	○	○
5. If I am worried about taking too long to become aroused, this can interfere with my arousal.	○	○	○	○
6. When I am having sex, I have to focus on my own sexual feelings in order to stay aroused.	○	○	○	○
7. If I am concerned about being a good lover, I am less likely to become aroused.	○	○	○	○
8. Unless things are "just right" it is difficult for me to become sexually aroused.	○	○	○	○
9. It would be hard for me to become sexually aroused with someone who is involved with another person.	○	○	○	○
10. I really need to trust a partner to become fully aroused.	○	○	○	○
11. If I am very sexually attracted to someone, I don't need to be in a relationship with that person to become sexually aroused.	○	○	○	○
12. If I think that I am being used sexually it completely turns me off.	○	○	○	○
13. If I think that a partner might hurt me emotionally, I put the brakes on sexually.	○	○	○	○
14. When I think about someone I find sexually attractive, I easily become sexually aroused.	○	○	○	○
15. I think about sex a lot when I am bored.	○	○	○	○
16. Sometimes I am so attracted to someone, I cannot stop myself from becoming sexually aroused.	○	○	○	○
17. Just talking about sex is enough to put me in a sexual mood.	○	○	○	○
18. Just being physically close with a partner is enough to turn me on.	○	○	○	○
19. Someone doing something that shows he/she is intelligent turns me on.	○	○	○	○
20. Seeing a partner doing something that shows his/her talent can make me very sexually aroused.	○	○	○	○
21. If I see a partner interacting well with others, I am more easily sexually aroused.	○	○	○	○
22. If a partner surprises me by doing chores, it sparks my sexual interest.	○	○	○	○
23. I find it arousing when a partner does something nice for me.	○	○	○	○
24. If it is possible someone might see or hear us having sex, it is more difficult for me to get aroused.	○	○	○	○
25. I get really turned on if I think I may get caught while having sex.	○	○	○	○
26. I find it harder to get sexually aroused if other people are nearby.	○	○	○	○
27. Having sex in a different setting than usual is a real turn on for me.	○	○	○	○
28. While having sex, it really decreases my arousal if my partner is not sensitive to the signals I am giving.	○	○	○	○
29. If interferes with my arousal if there is not a balance of giving and receiving pleasure during sex.	○	○	○	○
30. If I am uncertain how my partner feels about me, it is harder for me to get aroused.	○	○	○	○

Multiple Indicators of Subjective Sexual Arousal

Donald L. Mosher

Development

Three self-report measures of subjective sexual arousal (*Ratings of Sexual Arousal, Affective Sexual Arousal*, and *Genital Sensations*) were developed to serve as standard measures. Construction of the measures was designed to permit comparison of male and female subjective sexual arousal. To secure more uniform measurement across laboratories, item selection and analysis were guided by past research and theory, and careful attention was paid to the psychometric properties of the measures. The multiple indicators of self-reported sexual arousal were derived from past research that had variously used Likert-type rating scales (Jakobovits, 1965; Mosher & Abramson, 1977; Schmidt & Sigusch, 1970), adjective checklists (Mosher & Abramson, 1977; Mosher & Greenberg, 1969), and a checklist of genital sensations (Mosher & Abramson, 1977; Schmidt & Sigusch, 1970).Mosher, Barton-Henry, and Green (1988) developed the three measures of subjective sexual arousal presented here.

Response Mode and Timing

Ratings of Sexual Arousal consists of the five items, selected from a pool of 11 items, yielding the highest alpha coefficients across self-reports to four types of erotic fantasies. The five items selected were sexual arousal, genital sensations, sexual warmth, non-genital physical sensations, and sexual absorption. Each item is further defined: for example, "Sexual Warmth—a subjective estimate of the amount of sexual warmth experienced in the genitals, breasts, and body as a function of increasing vasocongestion (i.e., engorgement with blood)." If a sixth item is desired, the next best item is "Sexual Tension—subjective estimate of the sexual tension that presses toward release." A 7-point Likert-type format is used to rate the items with anchors of, for example, 1 (*no sexual arousal at all*) and 7 (*extremely sexually aroused*). This measure is appropriate for educated populations of men and women. The definitions of the concepts include technical vocabulary.

Respondents respond to these instructions: "For each item, indicate the response that best describes how you felt during the experience." Average completion time is 2 minutes.

Affective Sexual Arousal consists of five adjective prompts selected from a pool of 10 items embedded in a 70-item adjective checklist patterned after the Differential Emotions Scale (Izard, Dougherty, Bloxom, & Kotsch, 1974; Mosher & White, 1981). The adjective prompts that were included, following the item analysis across the four erotic fantasies, were sexually aroused, sensuous, turned-on, sexually hot, and sexually excited. If a sixth item is needed, it should be "sexy." Each adjective prompt was rated on a 5-point Likert-type scale as follows: 1 (*very slightly or not at all*); 2 (*slightly*); 3 (*moderately*); 4 (*considerably*); or 5 (*very strongly*). This measure of subjective sexual arousal contains standard and slang vocabulary understandable by both men and women, but it probably should be embedded within an affect adjective checklist.

Respondents respond by selecting the response which best describes "how they felt during the experience." Completion time can be estimated at 10 items per minute if embedded in a larger affect checklist.

Genital Sensations is an 11-item checklist modified from earlier versions of self-reports of genital sensations (Mosher & Abramson, 1977; Schmidt & Sigusch, 1970) by placing the items in an ordinal order and by writing brief descriptions of the genital sensations and bodily responses. The 11 items are as follows: no genital sensations, onset of genital sensations, mild genital sensations, moderate genital sensations, prolonged moderate genital sensations, intense genital sensations, prolonged intense genital sensations, mild orgasm, moderate orgasm, intense orgasm, and multiple orgasm. An example of the definitions given is "(4) Moderate genital sensations—vasocongestion sufficient to erect penis fully or to lubricate vagina fully." The vocabulary is appropriate for educated populations, but the arrangement into an ordered scale educates and helps a less educated group to respond.

Respondents indicate the peak or highest level of genital sensations felt during the experience. The measure requires 2 to 3 minutes to complete.

Scoring

For the *Ratings of Sexual Arousal* and *Affective Sexual Arousal* scales, scores are summed and a mean item score can be calculated. Higher scores indicate more subjective sexual arousal. For the *Genital Sensations* scale, participants receive 1 point for every level of genital sensation felt during the experience, and, as such, scores range from 1 to 11.

Reliability

Cronbach alpha coefficients for the two 5-item measures—*Ratings of Sexual Arousal* and *Affective Sexual Arousal*—in

a sample of 120 male and 121 female college students, as measured across four fantasy conditions, ranged from .92 to .97 and were robust across erotic conditions (Mosher et al., 1988). Median Cronbach alpha coefficients for *Ratings of Sexual Arousal* were .97 and for *Affective Sexual Arousal* were .96.

Validity

Evidence of convergent validity between the measures when cast into an intercorrelation matrix was strong, with a median validity coefficient—same scale across erotic conditions—of .52. Intercorrelations of the three measures of subjective sexual arousal within an erotic condition revealed median intercorrelations of approximately .81 for *Ratings of Sexual Arousal* with *Affective Sexual Arousal*, .74 for *Ratings of Sexual Arousal* with *Genital Sensations*, and .69 of *Affective Sexual Arousal* with *Genital Sensations* (Mosher et al., 1988). Further evidence of construct validity is available in the body of literature cited above which used similar measures.

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Exhibit

Multiple Indicators of Subjective Sexual Arousal

Ratings of Sexual Arousal

Instructions: For each item, indicate the response that best described how you felt during the experience.

1. Sexual Arousal—a subjective estimate of your overall level of sexual arousal.

	1	2	3	4	5	6	7	
No sexual arousal at all	○	○	○	○	○	○	○	Extremely sexually aroused

2. Genital Sensations—a subjective estimate of the amount and quality of sensation experienced in your genitals.

	1	2	3	4	5	6	7	
No sensation at all	○	○	○	○	○	○	○	Extreme genital sensation

3. Sexual Warmth—a subjective estimate of the amount of sexual warmth experienced in the genitals, breasts and body as a function of increasing vasocongestion, i.e., engorgement with blood.

	1	2	3	4	5	6	7	
No sexual warmth at all	○	○	○	○	○	○	○	Extreme sexual warmth

4. Non-Genital Physical Sensations—a subjective estimate of the physical sensations such as tickling, floating, or fullness that accompany your experience of sexual arousal.

	1	2	3	4	5	6	7	
No sensation at all	○	○	○	○	○	○	○	Extreme non-genital physical sensation

5. Sexual Absorption—a subjective estimate of your level of absorption in the sensory components of the experience.

	1	2	3	4	5	6	7	
No absorption at all	○	○	○	○	○	○	○	Extreme absorption

Ratings of Affective Sexual Arousal

Instructions: This scale consists of a number of words that describe different emotions or feelings. Please indicate the extent to which each word describes the way you felt during the preceding experiences by selecting the appropriate number on the five-point scale below.

In deciding on your answer to a given item or word, consider the feeling connoted or defined by that word. Then, if during the experience you felt that way *very slightly* or *not at all*, you would select the number 1 on the scale; if you felt that way to a *moderate* degree, you would select 3; if you felt that way *very strongly*, you would select 5, and so forth.

Remember, you are requested to make your responses on the basis of the way you felt during the experience. Work at a good pace. It is not necessary to ponder; the first answer you decide on for a given word is probably the most valid. It should not take more than a few minutes to complete the scale.

	1 Very slightly	2 Slightly	3 Moderately	4 Considerably	5 Very strongly
1. Sexually aroused	○	○	○	○	○
2. Sensuous	○	○	○	○	○
3. Turned-on	○	○	○	○	○
4. Sexually hot	○	○	○	○	○
5. Sexually excited	○	○	○	○	○

Ratings of Genital Sensations

Instructions: Genital sensations refer to sensory sensations in the genital region that accompany any source of somatogenic or psychogenic sexual stimulation and that are a function of increasing vasocongestion in the genital area. Males experience these sensations as accompaniments of penile erections and females experience these sensations as a function of the engorgement of the labia and the orgasmic platform in the vagina with accompanying vaginal lubrication. Below, indicate the peak level of genital sensation that you felt during the experience. The items are:

○ 1. No genital sensations.
○ 2. Onset of genital sensations—onset of swelling of penis or vulva or nipple erection.
○ 3. Mild genital sensations—vascongestion sufficient to begin penile erection or to begin vaginal lubrication.
○ 4. Moderate genital sensations—vasocongestion sufficient to erect penis fully or to lubricate vagina fully.
○ 5. Prolonged moderate genital sensations—maintain erection for several minutes or considerable vaginal lubrication for several minutes.
○ 6. Intense genital sensations—hard or pulsing erection and elevation of testicles in the scrotum; or receptive, engorged vagina or sex flush, or breast swelling or retraction of clitoris or ballooning of vagina.
○ 7. Prolonged intense genital sensations—near orgasmic levels of genital sensations; swelling of head of penis or high levels of muscular tension or heavy breathing or high heart rate; lasting several minutes and will produce orgasm if continued.
○ 8. Mild orgasm—mild orgasmic release, slow reduction of vasocongestion, 3–5 contractions.
○ 9. Moderate orgasm—moderate orgasmic release, average time to resolution of vascongestion, 5–8 contractions.
○ 10. Intense orgasm—intense orgasmic release with rapid resolution of vasocongestion, 8–12 contractions.
○ 11. Multiple orgasm—repeated orgasmic release in a single sexual episode.

5 Attitudes, Beliefs, and Cognitions

Dyadic Sexual Regulation Scale

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The Dyadic Sexual Regulation Scale (DSR) measures the extent to which an individual perceives sexual activity to be regulated from an internal versus an external locus of control. In developing a locus of control scale specific to the dyadic sexual situation, we sought to develop a scale that assesses perceptions of the ability to emit behaviors that (a) influence the acquisition and termination of sexual rewards, (b) effect events between these latter two points, and (c) prevent or avoid aversive sexual encounters. Moreover, the scale would reflect control flexibility, which is generally defined as an individual's ability either to relinquish or to accept control, dependent on the variant nature of social/sexual interactions. A shortened five-item interviewer-administered form of the DSR is also available.

Development

The scale items were derived from open-ended interviews about sexual attitudes with heterosexual and homosexual couples.

Response Mode and Timing

The DSR is an 11-item, subject- or interviewer-administered, Likert-type scale with seven points (1 = *strongly disagree*, 7 = *strongly agree*). All forms of the scale are available in English and Spanish. The expanded form is self-administered; the briefer revised form is interviewer administered. Both forms take 1–2 minutes to complete.

Scoring

Five items are reversed (Items 2, 5, 6, 8, 10) for counterbalancing purposes. After reverse-scoring selected items, total scores are computed by summing across items; higher scores indicate a greater degree of internal control (scores range from 11 [external] to 77 [internal]).

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Reliability

The DSR has been administered to college students, national urban probability samples constructed to adequately represent White, Black, and Hispanic ethnic groups, and HIV-risk groups (Catania, Coates, Kegeles et al., 1992; Catania, Coates, Stall et al., 1992). The DSR scale has also been administered to respondents from introductory psychology classes at a university recruited to participate in a sexual survey study that assessed locus of control in sexual contexts (Catania, McDermott, & Wood, 1984). The college-age analyses (Catania et al., 1984) examined only heterosexuals who had a current, regular sexual partner. Sample 1 consisted of 151 White students (59 males and 92 females) with a mean age of 27. Sample 2 consisted of 27 males and 43 females with similar demographic features as Sample 1. Reliability was good (Cronbach's alpha = .74 in Sample 1, and .83 in Sample 2). A principal component analysis with varimax rotation was conducted on the DSR items for Sample 1. There were no item loadings greater than .30 beyond the first factor, and the first factor accounted for 95 percent of the variance. Test–retest reliability was .77, with a 2-week interval.

The five-item shortened version of the DSR was administered to respondents recruited to participate in the 1990–1991 National AIDS Behavior Survey (NABS) longitudinal cohort study, which was composed of three interlaced samples designed to oversample African Americans and Hispanics for adequate representation (Catania, Coates, Kegeles et al., 1992; Catania, Coates, Stall et al., 1992). The interlaced samples included a national sample, an urban sample of 23 cities with high prevalence of AIDS cases, and a special Hispanic urban sample. The revised version of the DSR was administered to 4,620 respondents between the ages of 18–49. The reliability was good (Cronbach's alpha = .62 total sample). Means, standard deviations, range, median, and reliabilities are given for White, Black, and Hispanic groups, males and females, and levels of education for both national and urban-high risk city samples (Table 1). The shortened five-item version was also administered

TABLE 1
Normative Data for Dyadic Sexual Regulation Scale (NABS[a] Study Wave 2)

	N	*M*	*SD*	Range	*Mdn*	Alpha
National sample	1,022	15.62	2.83	15.0	16.0	.59
High-risk cities	3,598	15.37	2.86	15.0	15.0	.57
Ethnicity						
White						
National sample	747	15.75	2.75	15.0	16.0	.61
High-risk cities	1,565	15.62	2.68	15.0	16.0	.61
Black						
National sample	162	15.23	2.99	14.0	15.0	.47
High-risk cities	1,181	15.18	3.06	15.0	15.0	.52
Hispanic						
National sample	90	15.45	3.03	14.0	15.6	.61
High-risk cities	764	14.98	3.20	15.0	15.0	.60
Gender						
Male						
National sample	410	15.37	2.65	14.0	15.0	.86
High-risk cities	1,553	15.24	2.77	15.0	15.0	.56
Female						
National sample	612	15.85	2.98	15.0	16.0	.61
High risk cities	2,043	15.53	2.94	15.0	16.0	.58
Education						
< 12 years						
National sample	82	14.74	2.89	12.0	15.0	.38
High-risk cities	483	14.76	3.12	15.0	15.0	.53
= 12 years						
National sample	273	15.75	2.93	13.0	16.0	.59
High-risk cities	807	15.41	2.96	15.0	16.0	.54
> 12 years						
National sample	668	15.71	2.76	15.0	16.0	.59
High-risk cities	2,308	15.54	2.72	15.0	16.0	.58
AMEN[b] Study						
Total	954	15.08	3.01	15.0	15.0	.58
Ethnicity						
White	418	15.14	2.88	13.0	15.0	.63
Black	238	15.00	13.24	15.0	15.0	.53
Hispanic	229	14.98	3.08	15.0	15.0	.55
Gender						
Male	410	15.22	2.74	15.0	15.0	.52
Female	544	14.98	3.20	15.0	15.0	.61
Education						
< 12 years	109	15.44	3.30	13.0	16.0	.57
= 12 years	213	14.64	3.21	15.0	15.0	.54
> 12 years	626	15.26	2.86	14.0	15.0	.59

Note. Because weights for probability of selection are used, all frequencies may not sum to equal total frequencies.
[a]National AIDS Behavior Study.
[b]AIDS in Multi-Ethnic Neighborhoods.

to 954 respondents who participated in the third wave of the AIDS in Multi-ethnic Neighborhoods (AMEN) study (Catania, Coates, Stall et al., 1992). The AMEN study is a longitudinal study (three waves) in which the distribution of HIV, sexually transmitted diseases, related risk behaviors, and their correlates across social strata were examined (see Catania, Coates, Stall et al., 1992). Respondents ranged from 20–44 years of age and included White (N = 418) African-American (N = 124) and Hispanic (N = 229) ethnic groups. Reliability was moderate (Cronbach's alpha = .59). The mean, standard deviation, median, range, and reliabilities of ethnic groups, gender, and levels of education are provided in Table 1.

Validity

The DSR revealed convergent validity with the Nowicki-Strickland Adult Internal-External Control Scale (NSLC; Nowicki & Duke, 1974), $r = .19$, $p < .05$, $df = 149$ (Catania et al., 1984). The DSR was found to be related with each dyadic measure of sexual activity. The scale was not found to be related to monadic activities (i.e., masturbation), further supporting the concurrent validity of the DSR with locus of control. Internality with regard to sexual activity is associated with higher frequencies of intercourse, oral sex from partner, orgasms with partner, sexual relations, affectionate behaviors, and sexual satisfaction, and with lesser anxiety in sexual situations. DSR was not found to be related to gender. In contrast, the NSLC was more weakly associated with each criterion.

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Exhibit

Dyadic Sexual Regulation Scale

Instructions: The following statements describe different things people do and feel about sex. Please tell me how much you agree or disagree with these statements.

	1 Strongly agree	2	3	4	5	6	7 Strongly disagree
1. I often take the initiative in beginning sexual activity.	○	○	○	○	○	○	○
2. If my sexual relations are not satisfying there is little I can do to improve the situation.	○	○	○	○	○	○	○
3. I have sexual relations with my partner as often as I would like.	○	○	○	○	○	○	○
4. My planning for sexual encounters leads to good sexual experiences with my partner.	○	○	○	○	○	○	○
5. I feel that it is difficult to get my partner to do what makes me feel good during sex.	○	○	○	○	○	○	○
6. I feel that my sexual encounters with my partner usually end before I want them to.	○	○	○	○	○	○	○
7. When I am not interested in sexual activity I feel free to reject sexual advances by my partner.	○	○	○	○	○	○	○
8. I want my partner to be responsible for directing our sexual encounters.	○	○	○	○	○	○	○
9. I find it pleasurable at times to be the active member during sexual relations while my partner takes a passive role.	○	○	○	○	○	○	○
10. I would feel uncomfortable bringing myself to orgasm if the stimulation my partner was providing was inadequate.	○	○	○	○	○	○	○
11. During some sexual encounters I find it pleasurable to be passive while my partner is the active person.	○	○	○	○	○	○	○

The Sexual Importance Scale

John M. Dossett,[2] *Tennessee State University*

The Sexual Importance Scale (SIS) was developed to assess the importance individuals assign to sexual expression (Dossett, 2014). It is clear that people differ in beliefs about the importance of sexuality. But utility of the construct of sexual importance to facilitate our understanding of topics such as sexual decision making and relationship satisfaction has been limited by inadequate recognition of how sexual importance may differ from related constructs such as desire, erotophilia, and motivation. In addition, researchers who have included the construct in their research have generally been limited to the use of one-item assessments (e.g., Haavio-Mannila & Kontula, 1997; Herold & Milhausen, 1999; Laumann et al., 2006; Thomas, Chang, Dillon, & Hess, 2014). The SIS is a 17-item scale measuring beliefs about sexual importance utilizing items representing the kinds of real-world dilemmas that people face in sexual decision making.

Development

A focus group consisting of faculty and graduate students studying close relationships developed an initial set of 38 items. Items were designed to present participants with situations in which sexual expression is at

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odds with or made more difficult by common demands and obligations like those encountered in everyday life. The original items were administered to a sample of 239 students (150 female, 89 male) ranging in age from 18 to 49. Items that were consistent across multiple factor analysis extraction methods were retained in the final version of the instrument. Items with communalities below .35 with any extraction method were eliminated from the final scale. The final scale consisted of 17 items with a Cronbach's alpha of .85.

Response Mode and Timing

The SIS takes 2 to 4 minutes to complete and can be administered using paper-and-pencil or a computer. Participants respond by indicating their degree of support for each item on a 7-point Likert-type scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*).

Scoring

Two items (15 and 17) require reverse scoring. The total SIS score is computed by summing all individual item scores. Total scores range from 17 to 119. Higher scores indicate greater importance placed on sexual expression.

Reliability

The SIS demonstrates high internal consistency. Cronbach's alpha values ranged from .81 to .88 over four different samples during the instrument's development. The ability of the instrument to indicate the relative stability of sexual importance over time was assessed using a modified split-half procedure and calculating the corrected correlation (Nunnally, 1978). The correlation between scores collected 2 weeks apart was .72.

Validity

Evidence for construct validity of the SIS is provided by a predictable pattern of relationships with scores on established sexuality instruments, but coefficients are not high enough to suggest duplication of an existing measure (Kerlinger, 1986). Sexual importance is strongly positively correlated with sexual motivation, $r(284) = .52$, $p < .001$; sexual preoccupation, $r(284) = .44$, $p < .001$; erotophilia, $r(284) = .39$, $p < .001$; and sexual desire, $r(284) = .38$, $p < .001$. Sexual importance is negatively correlated with constructs such as sex guilt, $r(284) = -.30$, $p < .001$ and fear of sexual relationships, $r(284) = -.19$, $p = .002$.

The SIS has also demonstrated discriminant validity. Data was collected from participants who completed both the SIS and the Human Sexuality Questionnaire (Zuckerman, 2011). Scores on the SIS were unrelated to permissiveness as assessed by both the Social Relationship and the Emotional Relationship subscales of the Attitudes Toward Heterosexual Activities Scale (Zuckerman, 2011). Sexual importance is also unrelated to attitudes toward homosexuality in general.

Evidence indicates that the SIS has criterion validity. SIS scores are predictive of heterosexual experience in general, $r(127) = .20$, $p = .023$. And, sexual importance is predictive of several specific sexual behaviors such as masturbation experience, $r(127) = .28$, $p = .001$; number of heterosexual partners, $r(127) = .34$, $p < .001$; anal sex with someone of the opposite gender, $r(127) = .24$, $p = .007$; engaging in group sex, $r(127) = .25$, $p = .006$; use of erotic materials, $r(127) = .23$, $p = .01$; and practicing partner exchange, $r(127) = .19$, $p = .036$. The more important sex is to someone, the more likely they are to have engaged in a wider range of sexual activities.

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Exhibit

The Sexual Importance Scale

Please indicate whether you agree or disagree with each of the following statements. There are no wrong or right answers.

	1 Disagree strongly	2 Mostly disagree	3 Disagree a little	4 Neither agree nor disagree	5 Agree a little	6 Mostly agree	7 Agree strongly
1. Having a regular sex partner is one of the most important benefits of marriage or other long-term relationship.	○	○	○	○	○	○	○
2. I expect my partner to make being a good lover a high priority in our relationship.	○	○	○	○	○	○	○
3. Paying attention to each other sexually is one of the most important things couples should do to be happy together.	○	○	○	○	○	○	○
4. Couples would be happier if they spent more time making love.	○	○	○	○	○	○	○
5. When I am choosing a partner, average looks are okay as long as they are a good lover.	○	○	○	○	○	○	○
6. If I knew that I would not get caught, I can see myself doing something illegal to obtain sex.	○	○	○	○	○	○	○
7. When I am choosing a partner, it is okay if they are not that smart as long as they are a good lover.	○	○	○	○	○	○	○
8. If my partner wanted me to work less and spend more time making love, I would try and do as they wished.	○	○	○	○	○	○	○
9. I would feel justified in getting a divorce if I were not sexually satisfied.	○	○	○	○	○	○	○
10. If my partner refused to have sex with me after a reasonable amount of time in a dating relationship, I would feel justified in dumping them.	○	○	○	○	○	○	○
11. I would dump someone that I liked if I thought they were not good in bed.	○	○	○	○	○	○	○
12. When I am choosing a partner, it is okay if they don't have much money as long as they are a good lover.	○	○	○	○	○	○	○
13. I would do almost anything to obtain a peak sexual experience.	○	○	○	○	○	○	○
14. Paying attention to each other sexually is the most important thing couples should do to be happy.	○	○	○	○	○	○	○
15. I would not endanger my health for sex.	○	○	○	○	○	○	○
16. There is nothing more important in a long-term relationship than a good sex life.	○	○	○	○	○	○	○
17. Sex is just not that big of a deal to me.	○	○	○	○	○	○	○

Virginity Beliefs Scale

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The Virginity Beliefs Scale (VBS) assesses beliefs and motivations for engaging in sexual intercourse for the first time.

Development

The statements contained in the Virginity Beliefs Scale were developed using Carpenter's (2002) qualitative study of virginity loss. Carpenter (2002) found that individuals generally perceived of their virginity loss in three different ways: as a *gift*, a *stigma* or a *process*. Gift individuals were proud of their virginity and considered it to be a valuable gift to their first partner. Those identified as perceiving of their virginity as a stigma were anxious to lose their virginity as they perceived it as something to be embarrassed about. Process individuals saw their virginity loss as a step in their natural development toward becoming an adult. Carpenter (2002) suggested that these three frameworks influence first intercourse experiences. For example, those identifying virginity as a stigma were more likely to choose their first sexual partner based on opportunity, while those identifying their virginity as a gift chose their partner based on love and commitment. Carpenter (2002) presented support for the notion that how individuals perceive of their virginity loss may shape their sexual development and behaviour in the years following their first sexual intercourse experience. For instance, individuals identifying their virginity as a gift take a risk when deciding to lose their virginity. If their partner does not reciprocate, it is likely that these individuals feel that their experience was a mistake.

Response Mode and Timing

Participants indicate their agreement with each statement on a Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The VBS can be completed in approximately 5–8 minutes.

Scoring

The three frames contained in the VBS are scored separately. Mean *Gift* scores are calculated by summing Items 2, 3, 5, 7, 10, 12, 14, 16, 18, 20 and dividing by 10. Mean *Stigma* scores are calculated by summing Items 1, 6, 8, 11, 15, 17, 19, 21 and dividing by 8. *Process* mean scores are calculated by summing Items 4, 9, 13, 22 and dividing by 4. Mean scores on all three sub-scales can thus range between 1 and 7.

Reliability

In a sample of 223 undergraduates (Mean age = 19.9, *SD* = 2.4) from a small university in Ontario, Canada, Cronbach's alphas for the scales were .85 for *Gift*, .93 for *Stigma*, and .81 for *Process* (Eriksson & Humphreys, 2014, Study 1). An additional sample of 359 undergraduates at the same university provided reliabilities as follows: .90 for *Gift*, .86 for *Stigma* and .80 for *Process* (Eriksson & Humphreys, 2014, Study 2).

Confirmatory factor analysis ($N = 359$) demonstrated a good fit of the model ($\chi^2_{diff}(10) = 670.91$, $p < .001$), and a good fit to the data, $\chi^2(196, N = 359) = 489.47$, $p < .001$ ($\chi^2 / df = 2.50$), CFI = .93, RMSEA = .065 (.058 to .072), TLI = –.92 (Eriksson & Humphreys, 2014, Study 2).

Validity

Gift individuals tend to engage in intercourse for the first time for reasons related to improving their relationship with their partner and therefore choose their first partner with care (Carpenter, 2002). The concept of virginity as a gift is compatible with mainstream religious conceptions of virginity. As such, we expected that individuals scoring high on the *Gift* subscale would generally hold less permissive attitudes toward sexuality and be more religious. As expected, gift individuals reported having had fewer lifetime sexual partners, $r(217) = –.27$, $p < .001$. Gift individuals also reported less sexual permissiveness as measured by the permissiveness subscale of the Brief Sexual Attitudes Scale (Hendrick, Hendrick, & Reich, 2006), $r(223) = –.464$, $p < .001$ (Eriksson & Humphreys, 2014), and greater involvement in religion (i.e., frequency of religious services/activities), $r(242) = .14$, $p = .025$ (Eriksson & Humphreys, 2012).

Individuals perceiving their virginity as a stigma hold more traditional gender-role beliefs, $r(223) = –.32$, $p < .001$, as measured by the TESR scale (Larsen & Long, 1988), more hypergendered beliefs, $r(223) = –.36$, $p < .001$, as measured by the Hypergender Ideology Scale (HIS; Hamburger, Hogben, McGowan, & Dawson, 1996), more sexual permissiveness, $r(223) = .42$, $p < .001$, greater agreement with instrumental sexuality, $r(223) = .31$,

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$p < .001$, both measured by subscales of the BSAS (Hendrick et al., 2006) and greater agreement with the sexual double standard, $r(223) = .27$, $p < .001$, as measured by the DSS (Caron, Davis, Halteman, & Stickle, 1993). The concept of virginity as a stigma is closely tied to traditional masculine beliefs having to do with greater sexual readiness and activity.

Individuals perceiving their virginity as a process typically fall in between gift and stigma individuals in terms of traditional gender roles. Process individuals hold more permissive beliefs than gift individuals, but less permissive beliefs than stigma individuals, $r(223) = .25$, $p < .001$ (Eriksson & Humphreys, 2014).

In terms of affective reactions to first intercourse, as expected, *Gift* scores were correlated with overall positive emotions ($r = .38$, $p < .001$), *Process* scores were correlated with overall positive emotions ($r = .23$, $p < .001$), and *Stigma* scores were only correlated with feeling "relieved" ($r = .50$, $p < .001$) (see Eriksson & Humphreys, 2014, for detailed breakdown of correlations with specific feelings).

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Exhibit

Virginity Beliefs Scale

Please think back to the first time you engaged in sexual intercourse. Indicate on the following scale how much you agree with each statement in regards to your first sexual intercourse experience.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neutral	5 Somewhat Agree	6 Agree	7 Strongly Agree
1. I actively tried to hide my status as a virgin.	○	○	○	○	○	○	○
2. I chose the person I lost my virginity to with care.	○	○	○	○	○	○	○
3. I planned my first time carefully.	○	○	○	○	○	○	○
4. I saw my virginity loss as a natural step in my development.	○	○	○	○	○	○	○
5. It was important to me that the circumstances under which I lost my virginity were perfect.	○	○	○	○	○	○	○
6. I felt my virginity was a burden that I needed to get rid of as soon as possible.	○	○	○	○	○	○	○
7. It was important to me that my first time was romantic.	○	○	○	○	○	○	○
8. I felt embarrassed over being a virgin.	○	○	○	○	○	○	○
9. I considered virginity loss to be an inevitable part of growing up.	○	○	○	○	○	○	○
10. I dated the person I lost my virginity to for a long time before we engaged in intercourse.	○	○	○	○	○	○	○
11. I was worried about what others might think if they found out I was a virgin.	○	○	○	○	○	○	○
12. The reason I did not lose my virginity earlier was because I had not found the right partner.	○	○	○	○	○	○	○
13. I felt that losing my virginity was an important step towards becoming a man/woman.	○	○	○	○	○	○	○

14. I believed I would stay in a relationship with the person I lost my virginity to for a long time.	○	○	○	○	○	○	○
15. I lost my virginity later than I would have wanted.	○	○	○	○	○	○	○
16. I felt in love with the person I lost my virginity to.	○	○	○	○	○	○	○
17. I regarded my virginity as something negative.	○	○	○	○	○	○	○
18. My virginity was a gift to my first partner.	○	○	○	○	○	○	○
19. I was afraid my partner would find out I was a virgin.	○	○	○	○	○	○	○
20. I planned my virginity loss with my partner.	○	○	○	○	○	○	○
21. I was afraid to tell my partner that I was a virgin.	○	○	○	○	○	○	○
22. I felt losing my virginity was a step in the transition between adolescence and becoming an adult.	○	○	○	○	○	○	○

Attitudes Toward Sexuality Scale

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The Attitudes Toward Sexuality Scale (ATSS) was developed to allow the comparison of the sexual attitudes of adolescents between the ages of 12 and 20 and their parents. An instrument was needed that was brief, simplistic, and non-offensive in order to facilitate its use with younger adolescents and yet still be valid for adults. The ATSS consists of 13 statements related to topics such as nudity, abortion, contraception, premarital sex, pornography, sex work, sexual orientation, and sexually transmitted diseases.

Development

Items from Calderwood's Checklist of Attitudes Toward Human Sexuality (Calderwood, 1971) were modified and an objective scoring system was added. The result was a brief, general sexual attitudes measure that is equally appropriate for adolescents and adults (Fisher & Hall, 1988).

The original scale contained 14 items, but one of the items contributed so little to the total score variance that it was dropped from the scale. Several of the terms used in the scale have dropped out of usage since its development. The exhibit indicates the newer terminology that researchers would likely wish to use.

Response Mode and Timing

Respondents indicate the degree of their agreement/disagreement with the statement by selecting the response that most closely reflects their reaction. The 5-point Likert response format ranges from *strongly disagree* to *strongly agree*. The ATSS requires no more than 5 minutes to complete.

Scoring

Items 1, 4, 5, 7, 8, 11, and 13 are reverse scored by assigning a score of 1 if 5 was marked, a score of 2 if 4 was marked, etc. Then the number of points is totaled. Scores can range from 13 to 65, with lower scores indicating greater conservatism about sexual matters and higher scores indicating greater permissiveness about sexual matters.

Reliability

For a sample of 35 early adolescents (ages 12–14), the Cronbach's alpha coefficient was .76. Among 47 middle adolescents (ages 15–17), the alpha was .65, and for a group of 59 late adolescents (18–20 years old), the alpha was .80. The alpha for the total group of adolescents was .75. Among 141 parents (ages 31–66), the alpha was .84. The test–retest reliability coefficient, using an independent sample of 22 college students between the ages of 18 and 28 over a 1-month time period, was .90.

In subsequent samples of a different nature, the reliability was comparable. Landry and Bergeron (2011) obtained a Cronbach's alpha of .79 in their sample of female French Canadian high school students. In a small study ($N = 17$) of Muslim women and men between the

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ages of 18 and 27 (Ali-Faisal, 2014), the Cronbach's alpha was found to be .73, although in a prior study of Muslim women with a larger sample size (Abu-Ali, 2003), the alpha value was .79.

Validity

In a sample of college students between the ages of 18 and 28 (Fisher & Hall, 1988), the ATSS correlated highly with the Heterosexual Relations (Liberalism) scale of the Sexual Knowledge and Attitudes Test (SKAT; Lief & Reed, 1972), $r(42) = .83$. The ATSS was also correlated with the Abortion scale, $r(42) = .70$, the Autoeroticism scale $r(42) = .54$, and the Sexual Myths scale, $r(42) = .59$.

In studies of adolescents and their parents (Fisher, 1986; Fisher & Hall, 1988), age was negatively correlated with the ATSS score, $r(280) = -.18$, although for the young and middle adolescents combined, age was positively related to the ATSS score, $r(82) = .37$. Amount of education was found to be significantly correlated with the total scale score for the adult participants, $r(139) = .20$. Religiosity, as measured by church attendance, was significantly correlated to ATSS scores for the middle adolescents, $r(45) = -.32$; the older adolescents, $r(57) = -.44$; and the adults, $r(139) = -.41$, such that people who regularly attended church tended to be more conservative in their sexual attitudes. Chia (2006) reported that adolescents with more permissive scores on a slightly modified version of the ATSS were significantly more likely to report having experienced sexual intercourse, having experienced it at an earlier age, and having experienced it in more casual situations.

As has been found on other measures of sexual attitudes, male participants generally indicate more permissive sexual attitudes on the ATSS than female participants. In more recent research with this measure, sex difference findings have been mixed, with Fisher (2007) reporting a significant sex difference, but no sex differences found in other studies with similar samples (Alexander & Fisher, 2003; Fisher, 2009).

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Exhibit

Attitudes Toward Sexuality Scale

For each of the following statements, please mark the response which best reflects your reaction to that statement.

	1 Strongly Disagree	2 Somewhat Disagree	3 Neutral	4 Somewhat Agree	5 Strongly Agree
1. Nudist camps should be made completely illegal.	○	○	○	○	○
2. Abortion should be made available whenever a woman feels it would be the best decision.	○	○	○	○	○
3. Information and advice about contraception (birth control) should be given to any individual who intends to have intercourse.	○	○	○	○	○

4.	Parents should be informed if their children under the age of eighteen have visited a clinic to obtain a contraceptive device.	○	○	○	○	○
5.	Our government should try harder to prevent the distribution of pornography.	○	○	○	○	○
6.	Prostitution should be legalized.	○	○	○	○	○
7.	Petting (a stimulating caress of any or all parts of the body) is immoral behavior unless the couple is married.	○	○	○	○	○
8.	Premarital sexual intercourse for young people is unacceptable to me.	○	○	○	○	○
9.	Sexual intercourse for unmarried young people is acceptable without affection existing if both partners agree.	○	○	○	○	○
10.	Homosexual behavior is an acceptable variation in sexual orientation.	○	○	○	○	○
11.	A person who catches a sexually transmitted disease is probably getting exactly what he/she deserves.	○	○	○	○	○
12.	A person's sexual behavior is his/her own business, and nobody should make value judgments about it.	○	○	○	○	○
13.	Sexual intercourse should only occur between two people who are married to each other.	○	○	○	○	○

Sexual Daydreaming Scale of the Imaginal Processes Inventory

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The Imaginal Processes Inventory (IPI) was developed to measure the various aspects of daydreaming and related mental processes, such as attention, distractibility, and curiosity. The IPI is intended to be taken by normally functioning persons and is meant to measure the range of normal functioning. The Sexual Daydreaming Scale (SDS) was constructed to reveal the extent to which a person has daydreams of a sexual or erotic nature.

Development

The SDS consists of 12 items selected initially by requesting a large sample of "normal" adults to record their recurrent fantasies. An additional sample of respondents reviewed these fantasies and checked off those they had experienced by indicating the degree of frequency on a Likert-type scale. Those items bearing specifically on sexuality and showing reasonable intercorrelations as well as relatively normal distributions on the 5-point scale were employed for further refinement in the procedure used for generating the 12-item scales of the IPI (Singer & Antrobus, 1963, 1972). In general, this scale has not been used to any degree independently of the other 27 scales that make up the IPI because it loads on at least two of the three second-order factors that consistently emerge from the larger questionnaire.

Response Mode

Each of the 12 items has the same five optional responses: *Definitely Not True for Me, Usually Not True for Me, Usually True for Me, True for Me*, and *Very True for*

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Me. These options, in the order given, are assigned increasing larger integer values, either 0 to 4 or 1 to 5, depending upon the study cited.

Scoring

All items are scored directly, and a scale score consists of the sum of the values of the responses to the 12 items. Using this scoring method, the SDS can range from a minimum of zero to a maximum of 48 (or from 12 to 60). Higher scale scores indicate a greater likelihood of sexual daydreaming. An alternate method of scoring based upon a factor analysis of the IPI items is available in Giambra (1980a).

Reliability

The internal consistency of the SDS as measured by Cronbach's alpha has been reported to be quite high: .87 (Singer & Antrobus, 1972), .93 (Giambra, 1978), .93 (Giambra, 1980a). Test–retest reliability over a 1- to 3-year period based upon 45 men was .58, and no significant difference was observed between the first and second testing, $t < 1$.

Validity

In a sample of 565 men and 745 women from 17 to 92 years of age, it was found that the SDS correlated –.56 for men and –.52 for women with age; the partial correlation holding daydreaming frequency constant was –.41 for men and –.40 for women (Giambra, 1980b). For a life-span sample of men, Giambra and Martin (1977) determined that men who reported having a greater number of coital partners, who had a greater frequency of coitus during the first year or two of marriage, or who had a higher number of sexual events per week between ages 20 and 40 had significantly higher SDS values. For a sample of 477 women aged 40 to 60 years, the SDS was found to be significantly related to menopausal state, a menopausal symptom index, frequency of masturbation, interest in sexual relations relative to partner, and level of moodiness prior to menstrual period (Giambra, 1983a, 1983b); however, age did interact with these variables.

An extensive study of masturbatory fantasy in college students conducted by Campagna (1975) included a factor analysis of self-reports of sexual behavior as well as the scales of two factors of the IPI. One factor, reflecting a generally positive and constructive acceptance and use of daydreaming, included positive loadings for the SDS. Higher frequency and variability of sexual behavior of a relatively conventional heterosexual type was associated with higher scale scores for sexual fantasy. Those subjects who reported more elaborate "story-like" masturbation fantasies were also more likely to report more general fantasies and more sexual daydreams on the IPI.

Other Information

A revised, re-standardized short form of the Imaginal Processes Inventory (SIPI) has been developed by Huba, Aneshensel, and Singer (1981). This 45-item inventory taps the three second-order factors emerging from the longer IPI. The three scales are: Poor Attentional Control (mind-wandering and distractibility), Positive-Constructive Daydreaming, and Guilty-Dysphoric Daydreaming. In a study conducted by Rosenberg (1983) examining sexual fantasy and overt behavior in young male adults, there were indications that the Poor Attentional Control pattern characterized men who had more homosexual and less heterosexual fantasies or less masturbatory fantasies involving past sexual experiences. The Guilty Daydreaming Scale was more associated with masturbatory fantasies of beating or domination in masturbatory imagination ($r = .34$). The data suggested positive general daydreaming is associated with a more accepting attitude toward sexual behavior and sexual fantasies.

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Exhibit

Sexual Daydreaming Scale of the Imaginal Processes Inventory

Please indicate how true each of the following statements are for you.

	0 Definitely Not True For Me	1 Usually Not True For Me	2 Usually True For Me	3 True For Me	4 Very True For Me
1. My daydreams about love are so vivid, I actually feel they are occurring.	○	○	○	○	○
2. I imagine myself to be physically attractive to people of the opposite sex.	○	○	○	○	○
3. While working intently at a job, my mind will wander to thoughts about sex.	○	○	○	○	○
4. Sometimes on my way to work, I imagine myself making love to an attractive person of the opposite sex.	○	○	○	○	○
5. My sexual daydreams are very vivid and clear in my mind.	○	○	○	○	○
6. While reading, I often slip into daydreams about sex or making love to someone.	○	○	○	○	○
7. While traveling on a train or bus or airplane, my idle thoughts turn to love.	○	○	○	○	○
8. Whenever I am bored, I daydream about the opposite sex.	○	○	○	○	○
9. Sometimes in the middle of the day, I will daydream of having sexual relations with someone I am fond of.	○	○	○	○	○
10. In my fantasies, I arouse great desire in someone I admire.	○	○	○	○	○
11. Before going to sleep, my idle thoughts turn to love-making.	○	○	○	○	○
12. My daydreams tend to arouse me physically.	○	○	○	○	○

Sexual Idealization Scale

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The 9-item Sexual Idealization Scale (Goldsmith & Byers, 2018) assesses the extent to which individuals hold unrealistically positive beliefs about their sexual relationship with their partner.

Development

The items in this scale were based on items from the *Idealistic Distortion Scale* (Olson, 1999; Olson, Fournier, & Druckman, 1987). Five items were adapted from the

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shortened version of the *Idealistic Distortion Scale* (Olson, 1999); four items were adapted from the long (125 item) version of the *Idealistic Distortion Scale* (Olson, Fournier, & Druckman, 1987). These items were adapted to reflect idealization in terms of the sexual relationship rather than the romantic relationship in general. We administered this scale as part of a larger study to an online, predominantly North American, sample of men (n = 206) and women (n = 289) between the ages of 18 and 30 (M = 26.22, SD = 2.32) who were in romantic relationships of at least 6 months. Participants were recruited from Amazon's Mechanical Turk.

To determine the factor structure of the Sexual Idealization Scale, an exploratory factor analysis using principal axis factoring was conducted (N = 495). The KMO index for sampling adequacy indicated suitability for factoring (KMO –.811, Bartlett's test of sphericity p < .001). This analysis suggested two factors with eigenvalues greater than 1 (Kaiser, 1960). However, an examination of the scree plot indicated only 1 factor above the point of inflection (Cattell, 1978). In conjunction with the a priori one-factor structure, a one-factor solution was adopted. Subsequently, this factor structure was tested with the same sample (N = 495) using principal axis factoring and promax rotation (an oblique rotation), confirming the single factor structure (Westen & Rosenthal, 2003). The full model accounted for 48.11 percent of variance, and factor loadings for all 9 items ranged between .63 and .76, exceeding the recommended critical value of .326 (Westen & Rosenthal, 2003). None of the items fell below .30 for communality.

Response Mode and Timing

The measure can be completed in 2-3 minutes using paper-and-pencil or computer. Participants rate the extent to which they agree with each item on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Scoring

Items 4, 6, 8, and 9 are reverse-coded. The 9 items are then summed to create a total score. Possible scores range from 9 to 45. Higher scores indicate greater sexual idealization of the partner. Men (n = 206) and women (n = 289) scored similarly on this measure (M = 18.77, SD = 3.96 and M = 18.48, SD = 3.42, respectively). No significant gender difference was found.

Reliability

Internal consistency, evaluated using Cronbach's alpha based on all nine items, was high (a = .86, N = 495).

Validity

To establish the content validity of the scale, a group of sexuality researchers examined the items; they were judged to have good face and content validity. Scores on the scale were positively correlated with scores on the Idealistic Distortion Scale (Olson, 1999), providing evidence for its convergent validity, r = .61, p < .001 (Westen & Rosenthal, 2003). The scale was significantly positively correlated with the sexual frequency subscale of the Brief Index of Sexual Functioning for Women (Mazer, Leiblum, & Rosen, 2000), Routine and Strategic Relational Maintenance Scale (Stafford, Dainton, & Haas, 2000), Global Measure of Relationship Satisfaction (GMREL; Lawrance, Byers, & Cohen, 2011), and, Global Measure of Sexual Satisfaction (GMSEX; Lawrance et al., 2011) (rs = .17–.56, N = 495), providing evidence for its construct validity.

To determine discriminant validity, the average variance extracted (AVE; .42) was compared with the squared correlations between this measure and several other measures: the sexual frequency subscale of the Brief Index of Sexual Functioning for Women, the Online Sexual Experience Questionnaire (Shaughnessy & Byers, 2014), the Routine and Strategic Relational Maintenance Scale, the Global Measure of Relationship Satisfaction, and the Global Measure of Sexual Satisfaction. The squared correlations fell below the AVE value (.03–.31), indicating satisfactory discriminant validity (Tabachnick & Fidell, 2013).

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Exhibit

Sexual Idealization Scale

Please indicate the extent to which you agree with each of the following statements (1 = Strongly Disagree; 5 = Strongly Agree).

	1 Strongly disagree	2	3	4	5 Strongly agree
1. My partner and I understand each other's sexual likes and dislikes completely.	○	○	○	○	○
2. My partner completely understands my every sexual desire.	○	○	○	○	○
3. Every new thing I have learned about my partner sexually has pleased me.	○	○	○	○	○
4. There are times when my partner does things sexually that I do not like.	○	○	○	○	○
5. My partner has all of the sexual qualities I've always wanted in a mate.	○	○	○	○	○
6. My partner and I are not sexually compatible.	○	○	○	○	○
7. I can't imagine a more fulfilling sex life than the one I have with my partner.	○	○	○	○	○
8. I do not feel fulfilled by my sex life with my partner at times.	○	○	○	○	○
9. My partner does not meet all of my sexual needs.	○	○	○	○	○

The Brief Sexual Attitudes Scale

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The Sexual Attitudes Scale (SAS; Hendrick & Hendrick, 1987) was developed to broaden the assessment of sexual attitudes from a heavy reliance on sexual permissiveness to a more comprehensive and multidimensional approach that would continue to include permissiveness. The SAS was also designed to assess attitudes generically, including marital, partnered, and non-committed persons. Finally, the scale was intended to be psychometrically sound and to complement rather than duplicate existing measures. The Brief Sexual Attitudes Scale (BSAS; Hendrick, Hendrick, & Reich, 2006) was developed because our continuing research and that of others (e.g., Le Gall, Mullet, & Shafighi, 2002) indicated that the factor structure developed for the SAS had shifted slightly. In addition, all indices being equal, the briefer the measure, the greater its practicality for both research and clinical use.

Indeed, over the past couple of years, requests to use the SAS have been minimal ($N = 2$), whereas over 50 requests to use the BSAS have come from across the United States, Asia and Southeast Asia (e.g., Malaysia, Indonesia, Philippines), New Zealand, India and Pakistan, Iran, Russia, Brazil, Eastern Europe (e.g., Lithuania, Hungary, Poland) and Western Europe (e.g., England, Portugal). Therefore, we present the BSAS in this entry.

Development

Initial work on the SAS (Hendrick, Hendrick, Slapion-Foote, & Foote, 1985) involved item generation and reduction via principal components analysis (PCA) to a five-factor, 58-item scale. After additional sampling of nearly 1,400 university students from both Florida and Texas and extensive analyses employing PCA with Varimax rotation, 43 items across four factors were retained in a final scale (Hendrick & Hendrick, 1987). Given the nature of PCA, the factors were orthogonal, and the subscales were related modestly. The subscales and number of items follow. Permissiveness (21 items) measures a casual, open attitude toward sex. Sexual Practices (seven items) measures responsible (e.g., birth control) and

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tolerant (e.g., masturbation) sexual attitudes. Communion (nine items) presents sex as an ideal or "peak experience." Sexual Instrumentality (six items) reflects sex as a natural, biological, and self-oriented aspect of life. As noted, the scale is appropriate for partnered couples of all types whose relationships have a sexual component.

As noted above, research findings over the past several decades suggested that the factor structure as developed for the SAS might not be the best fitting one in current practice. Based on data from three studies (two existing data sets and one prospective study), and analyses that included principal components analyses, confirmatory factor analyses (CFA), alphas, subscale inter-correlations, test–retest correlations, correlations with relevant measures, and assessment of gender differences, the 43-item SAS was refined into the 23-item BSAS. The final four scales include *Permissiveness* (10 items), *Birth Control* (three items), *Communion* (five items), and *Instrumentality* (five items).

Response Mode and Timing

The SAS can be completed via computer or paper and pencil in 10–15 minutes; the BSAS can be completed in 5–10 minutes. Items are all written as statements, in a Likert format with which a respondent rates degree of agreement. The items are rated on a 5-point basis in a Likert format, with 1 (*strongly agree*), 2 (*moderately agree*), 3 (*neither agree nor disagree*), 4 (*moderately disagree*), and 5 (*strongly disagree*).

Scoring

The lower the score, the greater the endorsement of a subscale. Three items on the *Permissiveness* subscale on the SAS are reverse-scored, to reduce response bias. Scores for a given subscale are represented by subscale mean scores (i.e., total the item scores and divide by the number of items). It is not useful to obtain a total score on the SAS, given that the subscales are relatively independent, representing different orientations toward sex.

The response format for the BSAS is similar to that for the SAS. Scoring is handled similarly to the SAS, using mean scores for the subscales and no overall scale score. No items on the BSAS are reverse scored. The *Permissiveness* subscale comprises Items 1 to 10; the *Birth Control* subscale comprises Items 11 to 13; the *Communion* subscale comprises Items 14 to 18, and the *Instrumentality* subscale comprises Items 19 to 23.

Reliability

Reliability indices for the SAS are taken from Hendrick and Hendrick (1987) and included two studies. Reliability herein refers to internal consistency (Cronbach's alpha), test–retest reliability, and inter-subscale (i.e., intra SAS) correlations. Values were quite similar across two studies, with standardized alphas ranging from .71 for Sexual Practices to .94 for Permissiveness (Study 1). Test–retest correlations (Study I only) ranged from .66 for Instrumentality to .88 for Permissiveness. Finally, intra-scale correlations ranged from $r = .00$ between Permissiveness and Sexual Practices to $r = .44$ between Permissiveness and Instrumentality (Study 2).

In Study 3 using the BSAS from Hendrick et al. (2006), the alphas were .95 for Permissiveness, .88 for Birth Control, .73 for Communion, and .77 for Instrumentality. Inter-subscale correlations were .20 or less except for one that was .40 (Permissiveness with Instrumentality). Test–retest correlations were .92 for Permissiveness, .57 for Birth Control, .86 for Communion, and .75 for Instrumentality.

Validity

Initial criterion validity was demonstrated (Hendrick & Hendrick, 1987) by appropriate correlations between the SAS and measures such as the Reiss Male and Female Sexual Permissiveness Scales (Reiss, 1967) and the Revised Mosher Guilt Inventory (Green & Mosher, 1985). In other research, men reported themselves to be more permissive and instrumental than women reported themselves to be.

The SAS has been used in a variety of studies: exploring relationship infidelity and distress (Cann, Mangum, & Wells, 2001) and comparing men who commit different types of sexual assault (Abbey, Parkhill, Clinton-Sherrod, & Zawacki, 2007). The SAS was also used in a study of French adults (Le Gall et al., 2002), wherein the scale performed well but was found to have a scale structure differing slightly from the original four-factor structure. The Le Gall et al. (2002) findings and changes in language use and cohort influences over two decades prompted us to conduct a series of studies that resulted in the revision of the Sexual Attitudes Scale to the Brief Sexual Attitudes Scale, described below; however, it remains important to understand the research history of the SAS because it illustrates the strong historical base for the BSAS.

In Studies 1 and 2, using existing data sets (Hendrick et al., 2006), the BSAS and SAS performed similarly, though CFA fit indices were significantly better for the BSAS. Gender differences and correlations with other measures (e.g., love attitudes, relationship satisfaction) were very similar. In Study 3, the prospective study (Hendrick et al., 2006), the analytic strategy was similar to that for the previous two studies. CFA indices for the BSAS showed a Goodness of Fit Index (GFI) of .98, AGFI of .95, RMSEA of .05, CFI of .99, and χ^2 (21, 518) = 52.3.

The BSAS has been used in a number of settings. For example, Katz and Schneider (2013) found that Permissiveness and Instrumentality were positively related to positive attitudes and occurrence of college students' hook-up sex. As well, two subscales of the BSAS (Permissiveness and Birth Control) were used

in a large, nationwide survey of United States social work students' attitudes toward abortion and reproductive rights (Begun, Kattari, McKay, Winter, & O'Neill, 2017). They found that these two subscales were significantly negatively related to anti-choice attitudes toward abortion.

Other Information

Both the Sexual Attitudes Scale and the Brief Sexual Attitudes Scale are in the public domain and free for research and clinical use. Only the BSAS is reprinted here.

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Exhibit

Brief Sexual Attitudes Scale

Listed below are several statements that reflect different attitudes about sex. For each statement fill in the response on the answer sheet that indicates how much you agree or disagree with that statement. Some of the items refer to a specific sexual relationship, while others refer to general attitudes and beliefs about sex. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never had a sexual relationship, answer in terms of what you think your responses would most likely be.

	Strongly Agree with the Statement	Moderately Agree with the Statement	Neutral—Neither Agree nor Disagree	Moderately Disagree with the Statement	Strongly Disagree with the Statement
1. I do not need to be committed to a person to have sex with him/her.	○	○	○	○	○
2. Casual sex is acceptable.	○	○	○	○	○
3. I would like to have sex with many partners.	○	○	○	○	○
4. One-night stands are sometimes very enjoyable.	○	○	○	○	○
5. It is okay to have ongoing sexual relationships with more than one person at a time.	○	○	○	○	○
6. Sex as a simple exchange of favors is okay if both people agree to it.	○	○	○	○	○
7. The best sex is with no strings attached.	○	○	○	○	○
8. Life would have fewer problems if people could have sex more freely.	○	○	○	○	○
9. It is possible to enjoy sex with a person and not like that person very much.	○	○	○	○	○

10. It is okay for sex to be just good physical release.	○	○	○	○	○
11. Birth control is part of responsible sexuality.	○	○	○	○	○
12. A woman should share responsibility for birth control.	○	○	○	○	○
13. A man should share responsibility for birth control.	○	○	○	○	○
14. Sex is the closest form of communication between two people.	○	○	○	○	○
15. A sexual encounter between two people deeply in love is the ultimate human interaction.	○	○	○	○	○
16. At its best, sex seems to be the merging of two souls.	○	○	○	○	○
17. Sex is a very important part of life.	○	○	○	○	○
18. Sex is usually an intensive, almost overwhelming experience.	○	○	○	○	○
19. Sex is best when you let yourself go and focus on your own pleasure.	○	○	○	○	○
20. Sex is primarily the taking of pleasure from another person.	○	○	○	○	○
21. The main purpose of sex is to enjoy oneself.	○	○	○	○	○
22. Sex is primarily physical.	○	○	○	○	○
23. Sex is primarily a bodily function, like eating.	○	○	○	○	○

Implicit Theories of Sexuality Scale

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The 24-item Implicit Theories of Sexuality scale (Maxwell et al., 2017) measures individual differences in people's beliefs about how best to maintain sexual satisfaction in long-term relationships. The scale measures two specific beliefs including the belief that sexual satisfaction is attained from hard work and effort (Sexual Growth) and the belief that sexual satisfaction is attained through finding a compatible sexual partner (Sexual Destiny).

Development

We created an initial set of items by directly adapting 14 general Growth and Destiny items from the Implicit Theories of Relationships Scale (Knee, Patrick, & Lonsbary, 2003) to reflect specifically the domain of sexuality. We also created 21 face valid items, some of which were inspired by the Relationship Theories Questionnaire (Franiuk, Cohen, & Pomerantz, 2002). We administered

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these initial 35 items to an online Mechanical Turk sample ($N = 264$) of individuals in relationships 6 months or longer. Using an exploratory factor analysis, we determined that, as anticipated, the scale had a two-factor solution: Sexual Destiny and Sexual Growth beliefs. We then pruned our scale to 24 items that had strong (> .5) factor loadings and low cross-loadings (< .3).

We subsequently recruited a new sample of cohabiting/married individuals from Mechanical Turk (N =456) to conduct a confirmatory factor analysis on our final 13 *Sexual Growth* items and 11 *Sexual Destiny* items. Our scale had adequate fit (CFI = .90, BIC = 26350.004, RMSEA = .059, SRMR = .059), and a two-factor solution was more appropriate than an ill-fitting one factor solution (CFI = .71, BIC = 27266.199, RMSEA = .098, SRMR = .13.) We further confirmed our scale's measurement structure in a pre-registered study ($N = 364$; https://osf.io/afk6j/).

In Study 5 of Maxwell and colleagues (2017), we administered the 5 most face valid or highest loading items from each subscale to create a shortened 10-item version of the scale. Although we did not conduct traditional scale validation procedures for this shortened version, it produced reliability levels, mean scores, and results consistent with the full scale (see Table 1).

Response Mode and Timing

The measure can be completed on a computer or using paper-and-pencil in approximately 2–4 minutes. Participants indicate their agreement with the items on a 7-point scale ranging from *strongly disagree* to *strongly agree*, with no scale anchors labeled in between these endpoints. We worded items to reflect the individual's outlook on sexual relationships in general, and not necessarily one's current relationship specifically.

Scoring

No items are reverse scored. The 13 items on the *Sexual Growth* subscale (Items: 2, 3, 5, 7, 8, 9, 10, 12, 16, 17, 19, 23, 24) are averaged to create a total *Sexual Growth* score, and the 11 items on the *Sexual Destiny* subscale (Items: 1, 4, 6, 11, 13, 14, 15, 18, 20, 21, 22) are averaged to create a total *Sexual Destiny* score. For the shortened version of the scale, administer Items 5, 7, 16, 19 and 23 to measure *Sexual Growth* and Items 1, 6, 13, 14 and 20 to measure *Sexual Destiny*. Higher scores indicate greater endorsement of the respective belief. Sample means for *Sexual Growth* range from 5.13 to 5.83, and from 2.97 to 3.91 for *Sexual Destiny* (see Table 1). *Sexual Growth* and *Sexual Destiny* are typically moderately negatively correlated (see Table 1). We tend to find higher *Sexual Destiny* beliefs among men (e.g., $d = .32$), those in shorter relationships (e.g., $r = –.17$), and those having more sex (e.g., $r = .12$); whereas we find higher *Sexual Growth* among women (e.g., $d = .30$) and those in longer relationships (e.g., $r = .17$; sample values reported for Maxwell et al., 2017, Study 1).

TABLE 1
Summary of Existing Samples Using the Implicit Theories of Sexuality Scale

Sample		*M*	*SD*	Reliability (α)	Correlation (*r*) between Sexual Growth and Sexual Destiny
Study 1 (Maxwell et al., 2017; $N = 264$) Mechanical Turk: Individuals in relationships longer than 6 months	Sexual Growth	5.74	.80	.91	–.28
	Sexual Destiny	2.97	1.11	.93	
Study 2 (Maxwell et al., 2017; $N = 456$) Mechanical Turk: Cohabitating or married individuals	Sexual Growth	5.83	.75	.88	–.36
	Sexual Destiny	3.01	1.19	.91	
Study 3 (Maxwell et al., 2017; $N = 56$) Craigslist: Cohabitating or married individuals	Sexual Growth	5.13	.10	.90	.09
	Sexual Destiny	3.91	1.21	.90	
Study 4 (Maxwell et al., 2017; $N = 198$) In-Lab: Undergraduate couples	Sexual Growth	5.68	.64	.83	–.16
	Sexual Destiny	3.19	.98	.88	
Study 5 (Maxwell et al., 2017; $N = 548$) Online: Couples who were first-time parents	Sexual Growth (short version)	5.52	1.17	.87	–.40
	Sexual Destiny (short version)	3.58	1.34	.85	
Study 6 (Maxwell et al., 2017; $N = 373$) Online: Undergraduate students in relationships > 6 months	Sexual Growth	5.56	.71	.83	.00
	Sexual Destiny	3.29	1.02	.86	
Study 7 (Maxwell & MacDonald, 2015; $N = 302$) Mechanical Turk: Individuals in relationships > 2 years	Sexual Growth	5.79	.74	.89	–.43
	Sexual Destiny	3.27	1.31	.93	
Study 8 (Maxwell, Vandenbosch, Muise & Impett, 2014; $N = 82$) Online: Belgian undergraduate students (scale translated to Dutch)	Sexual Growth	5.28	.56	.83	–.04
	Sexual Destiny	3.07	.79	.86	

Note. Unless otherwise specified, sample was American/Canadian.

Reliability

Across diverse samples, including undergraduate students, married individuals, and new parent couples, our measure shows consistent reliability, with Cronbach's alpha values ranging from .83 to .93. Test–retest reliability examined after a period of 4 months ($N = 156$) indicated that *Sexual Destiny* ($r = .66$) and *Sexual Growth* ($r = .54$) are somewhat stable. Nevertheless, in a daily experience study, these beliefs did show meaningful variations from day to day (Maxwell et al., 2017; Study 3), with *Sexual Destiny* fluctuating more than *Sexual Growth*.

Validity

Although *Sexual Destiny* and *Sexual Growth* beliefs strongly correlate with general relationship Destiny and Growth beliefs respectively (rs ~ .5–.7; Maxwell et al., 2017; Studies 1, 2, and 4), our measure uniquely predicts relational outcomes above and beyond general relationship beliefs (see Maxwell et al., 2017). To establish discriminant validity, we differentiated our scale from other personality variables and other sexual beliefs (see Maxwell et al., 2017 for greater discussion). For example, neither of the beliefs significantly correlate with sociosexual orientation (rs < .09; $N = 306$). Providing convergent validity, we see small positive associations between *Sexual Growth* and sexual agency ($r = .26$; Table 1, Study 8) and sexual self-esteem ($r = .21$; Table 1, Study 8). Conversely, *Sexual Destiny* predicts stronger views that dating is a game ($r = .29$; Table 1, Study 8) and that sex is a barometer of relationship quality ($r = .34$, $N = 306$). Our scale has predominantly been completed by individuals in relationships; however, we have included single individuals in one sample (Table 1, Study 8).

Summary

Our measure has been used in diverse samples (Canada, U.S., Belgium) both in-lab and online. We consistently find that *Sexual Growth* is positively associated with sexual satisfaction and relationship quality measures. Conversely, we find the relationship quality of those high in *Sexual Destiny* is contingent on the level of sexual compatibility they feel with their partner. Examining cultural differences in these beliefs, and whether they shift across one's relationships remain interesting directions for future work.

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Exhibit

Implicit Theories of Sexuality Scale

Please indicate your agreement/disagreement to the following items:

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree
1. Experiencing sexual problems is a sure sign that a couple is not sexually compatible.	○	○	○	○	○	○	○
2. Sexual satisfaction often fluctuates over the course of a relationship.	○	○	○	○	○	○	○
3. A satisfying sexual relationship evolves through hard work and resolution of incompatibilities.	○	○	○	○	○	○	○
4. Couples who experience sexual incompatibilities in their relationship will inevitably break up.	○	○	○	○	○	○	○
5. In order to maintain a good sexual relationship, a couple needs to exert time and energy.	○	○	○	○	○	○	○
6. An unsatisfying sex life suggests that the relationship was never meant to be.	○	○	○	○	○	○	○
7. Successful sexual relationships require regular maintenance.	○	○	○	○	○	○	○
8. Without acknowledging romantic partners' different sexual interests, a sexual relationship cannot improve.	○	○	○	○	○	○	○

9. A satisfying sexual relationship is partly a matter of learning to resolve sexual differences with a partner.	○	○	○	○	○	○	○
10. Making compromises for a partner is part of a good sexual relationship.	○	○	○	○	○	○	○
11. If a couple is truly in love, partners will naturally have high sexual chemistry.	○	○	○	○	○	○	○
12. Working through sexual problems is a sign that a couple has a strong bond.	○	○	○	○	○	○	○
13. Struggles in a sexual relationship are a sure sign that the relationship will fail.	○	○	○	○	○	○	○
14. A couple is either destined to have a satisfying sex life or they are not.	○	○	○	○	○	○	○
15. It is clear right from the start how satisfying a couple's sex life will be over the course of their relationship.	○	○	○	○	○	○	○
16. In a relationship, maintaining a satisfying sex life requires effort.	○	○	○	○	○	○	○
17. Sexual desire is likely to ebb and flow (i.e., change) over the course of a relationship.	○	○	○	○	○	○	○
18. A passionate sex life is a sign that two partners are meant to be.	○	○	○	○	○	○	○
19. Communicating about sexual issues can bring partners closer together.	○	○	○	○	○	○	○
20. Troubles in a sexual relationship signify a poor match between partners.	○	○	○	○	○	○	○
21. If sexual satisfaction declines over the course of a relationship, it suggests that a couple is not a good match.	○	○	○	○	○	○	○
22. If sexual partners are meant to be together, sex will be easy and wonderful.	○	○	○	○	○	○	○
23. Acknowledging each other's differing sexual interests is important for a couple to enhance their sex life.	○	○	○	○	○	○	○
24. Even satisfied couples will experience sexual challenges at times.	○	○	○	○	○	○	○

Worry About Sexual Outcomes Scale

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The Worry About Sexual Outcomes (WASO) Scale was developed to assess adolescents' worry regarding outcomes of risky sexual behavior (i.e., STIs/HIV infection and unintended pregnancy; Sales et al., 2008).

Development

The WASO was developed as part of a NIMH-funded intervention grant (Sales et al., 2008). Domains pertinent to worry about the outcomes of risky sexual behavior were selected based on a review of the empirical literature. Three topics were frequently noted in the literature with regard to worry pertaining to the sexual outcomes of risky sexual behavior: (a) pregnancy, (b) STI, and (c) HIV. Focus groups of African American adolescent females were conducted to verify that these topics were relevant in their sexual relationships. Eighteen items were created to assess worry in these domains. Health educators assessed

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face validity of the items. The measure was pilot-tested on 15 African American adolescent females 14 to 18 years of age. Based on their suggestions, items were revised to enhance reading comprehension. Items that were highly correlated and thought to assess the same construct, as well as items that decreased the Cronbach's alpha below .90, were deleted, leaving a 10-item scale consisting of two subscales: STI/HIV Worry (eight items) and Pregnancy Worry (two items). Data from a longitudinal evaluation study were used to validate the measure (Sales et al., 2008).

Though the WASO was designed for adolescent females and validated with an African American female sample, the items are more broadly applicable to individuals of other racial or ethnic backgrounds and other age groups, and to males. Since its original publication in 2008, the WASO has been successfully used in research with various groups of adolescents, young adults (i.e., college students) and adult women in the U.S. (e.g., Burnett, Sabato, Wagner, & Smith, 2014; Hirschler, Hope, & Myers, 2015; Painter et al., 2013), as well as with males (e.g., Haley, Puskar, Terhorst, Terry, & Charron-Prochownik, 2013). Further, the WASO has been administered around the globe, including in Nigeria (Oguamanam, 2012), the Netherlands (Wolfers, de Zwart, & Kok, 2011), Spain (Bermúdez, Castro, & Buela-Casal, 2011; de Araújo, Teva, & Bermúdez 2014), South Africa (Mmasetjana, 2014), Slovenia (Mmasetjana, 2014), and Iran (Nararkolaei et al., 2014).

Response Mode and Timing

A single stem is used for all items: "In the past six months, how often did you worry that . . ." Each item requires a response based on a 4-point Likert-type scale: 1 (*never*), 2 (*sometimes*), 3 (*often*), and 4 (*always*). The scale typically takes less than 5 minutes to complete.

Scoring

All items are coded so that higher values indicate more frequent worrying about these health outcomes. Scores can be calculated in two ways: (a) items are summed to create a total scale score for the full 10 items, or (b) items are summed to create two subscale scores: *STI/HIV Worry* (Items 1 to 8) and *Pregnancy Worry* (Items 9 and 10). Scores on the total scale range from 10 to 40. Scores on the *STI/HIV Worry* subscale range from 8 to 32. Scores on the *Pregnancy Worry* subscale range from 2 to 8.

The mean score for participants in our validation sample for the total scale was 16.81 ($SD = 6.43$). Participants in the validation sample had a mean score of 15.52 ($SD = 5.96$) for the *STI/HIV Worry* subscale and a mean score of 4.43 ($SD = 2.03$) for the *Pregnancy Worry* subscale (Sales et al., 2008).

Reliability

Stability of the measure was assessed by Pearson correlation. Because it has been suggested that the length of time between reliability assessments mirrors the length of time in intervention studies (Gliner, Morgan, & Harmon, 2001), measurement stability was assessed with six months between administrations. Sample sizes for each administration were: baseline ($N = 518$), 6-month follow-up ($N = 468$), and 12-month follow-up ($N = 458$). Baseline scores on the full WASO (all 10 items) were significantly correlated with scores at 6-month follow-up ($r = .38$, $p < .01$) and with scores at 12-month follow-up ($r = .27$, $p < .01$). Further, scores at 6-month follow-up were significantly correlated with scores at 12-month follow-up ($r = .44$, $p < .01$; Sales et al., 2008).

Validity

The WASO was correlated with other related constructs in the predicted directions (Sales et al., 2008). Specifically, frequency of worry about sexual outcomes was negatively associated with sexual communication self-efficacy (with new partner and steady partner), frequency of sexual communication with partner (Milhausen et al., 2007), attitudes about condom use (St. Lawrence et al., 1994), and social support (Zimet, Dahlem, Zimet, & Farley, 1988). Additionally, it was positively associated with barriers to condom use (St. Lawrence et al., 1999), condom negotiation, external locus of control, and depression (Melchior, Huba, Brown, & Reback, 1993). The *STI/HIV Worry* subscale correlations mirror the findings for the overall scale score. The *Pregnancy Worry* subscale was negatively associated with frequency of sexual communication with partner (Milhausen et al., 2007) and positively associated with barriers to condom use (St. Lawrence et al., 1999), external locus of control, and depression (Melchior et al., 1993).

The WASO was negatively correlated with condom use at last vaginal sex with steady partners, condom use during the previous 30 days with steady partners, and condom use with steady partner over the previous 6 months. Again, the *STI/HIV Worry* subscale mirrored the findings for the overall scale score. The *Pregnancy Worry* subscale was also negatively correlated with aforementioned condom use variables. Additionally, *Pregnancy Worry* scores were positively correlated with frequency of vaginal intercourse with steady and non-steady partners in the previous 30 days. The correlations were all significant and effect sizes were small to moderate (Cohen, 1988).

Other Information

The WASO is a brief, self-administered behavioral scale measuring adolescents' worry regarding outcomes of risky sexual behavior (i.e., STIs/HIV infection and unintended pregnancy), suitable for low-literate samples (requiring a fourth-grade reading level). Researchers may find the WASO particularly useful in sexual health education interventions for assessing worry of STI/HIV and pregnancy pre- and postintervention to evaluate intervention efficacy.

The authors would appreciate receiving information about the results obtained with this measure.

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Exhibit

Worry About Sexual Outcomes Scale

In the past 6 months, how often did you worry that …

	Never	Sometimes	Often	Always
1. …you might get the HIV virus.	○	○	○	○
2. …you might already have the HIV virus.	○	○	○	○
3. …your sex partner may be infected with the HIV virus.	○	○	○	○
4. …your partner may become infected with the HIV virus.	○	○	○	○
5. …you might get an STI.	○	○	○	○
6. …you might already have an STI.	○	○	○	○
7. …your partner may be infected with an STI.	○	○	○	○
8. …your partner may become infected with an STI.	○	○	○	○
9. …you might get pregnant.	○	○	○	○
10. …you might already be pregnant.	○	○	○	○

Sexual Beliefs Scale

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We developed the Sexual Beliefs Scale (SBS) to measure five beliefs—four negative and one positive—related to rape: the beliefs that (a) women often indicate unwillingness to engage in sex when they are actually willing (*Token Refusal, TR*); (b) if women "lead men on," behaving as if they are willing to have sex when in fact they do not, men are justified in forcing them (*Leading on Justifies Force, LJF*); (c) women enjoy force in sexual situations (*Women Like Force, WLF*); (d) men should dominate women in sexual situations (*Men Should Dominate, MSD*); and (e) women have a right to refuse sex at any point, at which time men should stop their advances (*No Means Stop, NMS*). Authors have used this scale as a measure of rape myths, acceptance of rape culture, and heteronormative beliefs.

Scale items reflect these themes. The short form has 20 items (four items per subscale); the long form has 40 items (8 items per subscale). Many respondents found the long form repetitious, and correlations between the forms were high (from .96 to .98); thus, we recommend the short form for most purposes.

Some authors have modified this scale to meet their needs. Some have used a 5-point response scale; some used items from only one or two of the subscales (e.g., Eaton & Matamala, 2014). Some replaced an item on the short form with an item on the long form (van Oosten, Peter, & Valkenburg, 2015).

Development

We created an item pool by identifying positive and negative themes related to rape and generating items reflecting these themes. We created subscales using a series of principle-components analyses.

Response Mode and Timing

Respondents rate items using a 4-point scale from *disagree strongly (0) to agree strongly (3)*. The SBS can be administered on paper or online. The short form requires less than 5 minutes; the long form, less than 10 minutes.

Scoring

Subscale scores are derived by calculating the mean for each subscale. Higher scores reflect greater agreement with the subscale theme.

These are the items included on each subscale. For the 20-item short form, include the first four items listed for each subscale. For the 40-item long form, also include the items in parentheses.

- *Token Refusal*: 13, 20, 28, 36 (7, 17, 24, 39)
- *Leading on Justifies Force*: 11, 23, 29, 33 (3, 8, 19, 31)
- *Women Like Force*: 4, 14, 27, 40 (5, 9, 18, 37)
- *Men Should Dominate*: 1, 10, 26, 30 (12, 16, 22, 35)
- *No Means Stop*: 15, 21, 25, 32 (2, 6, 34, 38)

Some authors calculated a composite score (e.g., Armstrong & Mahone, 2017; Dill, Brown, & Collins, 2008). Because the *NMS* emphasizes respect for women's refusals—whereas the other subscales reflect rape-conducive beliefs—*NMS* items must be reverse scored before combining subscales.

Reliability

For a sample of 337 male and female undergraduates, Cronbach's alphas for the short and long forms, respectively, were as follows: *TR*, .71/.84; *LJF*, .90/.92; *WLF*, .92/.95; *MSD*, .85/.93; *NMS*, .94/.96. In other samples, Milhausen, McBride, and Jun (2006) found subscale alphas from .62 to .86 (median = .80). Dill et al. (2008) found alphas from .71 (*TR*) to .94 (*NMS*); alpha for the 20-item composite was .83.

Validity

Muehlenhard and Hollabaugh (1988) found that women who had engaged in token refusal of sexual intercourse—indicating no but meaning yes— had higher *TR* scores than other women, indicating that they regarded token refusal as a widespread behavior.

Muehlenhard and MacNaughton (1988) compared women with *LJF* scores in the lowest, middle, and highest 15 percent of the distribution. Compared with low-*LJF* women, high-*LJF* women rated a hypothetical rape victim as more responsible for the rape, rated it as more justified, etc. Medium- and high-*LJF* women were more likely than low-*LJF* women to report having engaged in unwanted intercourse because a man had become so aroused that they felt it was useless to stop him.

Muehlenhard, Andrews, and Beal (1996) compared men with high *LJF* scores (*LJF* men), men with low *LJF*

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but high *TR* scores (*TR* men), and men with low *LJF* and *TR* scores (low-myth men). For self-rated likelihood of attempting intercourse with a woman who had refused, *LJF* men scored higher than *TR* men; both scored higher than low-myth men. When asked to assume that she *really had* meant no, *TR* men no longer differed significantly from low-myth men, suggesting that *TR* men had not believed her refusal, but *LJF* men still scored significantly higher than low-myth men. The distinct pattern for each group illustrates the value of measuring these beliefs separately.

Jones and Muehlenhard (1990) investigated the effects of a classroom lecture aimed at decreasing rape-conducive beliefs. Four weeks later, students in classes receiving the lecture scored significantly lower than students in control classes on the *TR, LJF, WLF*, and *MSD* subscales (and on Burt's, 1980, Rape Myth Acceptance, Adversarial Sexual Beliefs, and Acceptance of Interpersonal Violence scales). They did not differ significantly on the *NMS* subscale; even control classes had high *NMS* scores.

Assessing another sexual assault prevention program, Milhausen et al. (2006) found significant pre-to-posttest decreases on *WLF* and *TR* scores. Unexpectedly, *NMS* scores also decreased slightly but significantly.

Dill et al. (2008) found that *SBS* composite scores correlated significantly with exposure to violent video games ($r = .24$), especially first-person shooter games ($r = .26$).

Consistent with numerous studies showing that men endorse rape-conducive beliefs more strongly than women do, Milhausen et al. (2006) found that men scored higher than women on all the SBS subscales except *NMS*. Similarly, Dill et al. (2008) found that men scored higher than women on the 20-item composite.

Other Information

In summary, numerous studies support the validity of the *SBS*. The *No Means Stop* subscale, however, seems less useful than the others. Some respondents endorsed *NMS* items, agreeing that men should stop when women say No, but also endorsed items saying that "no often means yes" and that women who "lead men on" deserve to be forced. Similar patterns have been found in other studies (e.g., Goodchilds & Zellman, 1984); some respondents stated that forced intercourse is *never* justified *and* that forced intercourse *is* justified in some circumstances.

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Exhibit

Sexual Beliefs Scale

Below is a list of statements regarding sexual attitudes. Using the scale below, indicate how much you agree or disagree with each statement. There are no right or wrong answers, only opinions.

	Disagree Strongly	Disagree Mildly	Agree Mildly	Agree Strongly
1. Guys should dominate girls in bed.	○	○	○	○
2. Even if a man really wants sex, he shouldn't do it if the girl doesn't want to.	○	○	○	○
3. Girls who are teases deserve what they get.	○	○	○	○
4. By being dominated, girls get sexually aroused.	○	○	○	○
5. A little force really turns a girl on.	○	○	○	○
6. It's a girl's right to refuse sex at any time.	○	○	○	○

7.	Girls usually say No even when they mean Yes.	○	○	○	○
8.	When a girl gets a guy obviously aroused and then says No, he has the right to force sex on her.	○	○	○	○
9.	Girls really want to be manhandled.	○	○	○	○
10.	Men should decide what should happen during sex.	○	○	○	○
11.	A man is justified in forcing a woman to have sex if she leads him on.	○	○	○	○
12.	A man's masculinity should be proven in sexual situations.	○	○	○	○
13.	Girls generally want to be talked into having sex.	○	○	○	○
14.	Girls think it is exciting when guys use a little force on them.	○	○	○	○
15.	A guy should respect a girl's wishes if she says No.	○	○	○	○
16.	The man should be the one who dictates what happens during sex.	○	○	○	○
17.	Girls say No so that guys don't lose respect for them.	○	○	○	○
18.	Feeling dominated gets girls excited.	○	○	○	○
19.	A girl who leads a guy to believe she wants sex when she really doesn't deserves whatever happens.	○	○	○	○
20.	Women often say No because they don't want men to think they're easy.	○	○	○	○
21.	When girls say No, guys should stop.	○	○	○	○
22.	During sex, guys should be in control.	○	○	○	○
23.	When a girl toys with a guy, she deserves whatever happens to her.	○	○	○	○
24.	Girls just say No so as not to look promiscuous.	○	○	○	○
25.	At any point, a woman always has the right to say No.	○	○	○	○
26.	Guys should have the power in sexual situations.	○	○	○	○
27.	Women really get turned on by men who let them know who's boss.	○	○	○	○
28.	Girls just say No to make it seem like they're nice girls.	○	○	○	○
29.	Girls who tease guys should be taught a lesson.	○	○	○	○
30.	The man should be in control of the sexual situation.	○	○	○	○
31.	Girls who act like they want sex deserve it when the guy follows through.	○	○	○	○
32.	Even if a man is aroused, he doesn't have the right to force himself on a woman.	○	○	○	○
33.	Girls who lead guys on deserve what they get.	○	○	○	○
34.	If a woman says No, a man has no right to continue.	○	○	○	○
35.	Men should exercise their authority over women in sexual situations.	○	○	○	○
36.	When girls say No, they often mean Yes.	○	○	○	○
37.	It really arouses girls when guys dominate them in bed.	○	○	○	○
38.	If a girl doesn't want sex, the guy has no right to do it.	○	○	○	○
39.	Girls who act seductively really want sex, even if they don't admit it.	○	○	○	○
40.	Girls like it when guys are a little rough with them.	○	○	○	○

Sexual Dysfunctional Beliefs Questionnaire

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The Sexual Dysfunctional Beliefs Questionnaire (SDBQ; Nobre, Pinto-Gouveia, & Gomes, 2003) is a 40-item instrument designed to assess sexual dysfunctional beliefs as an indicator of vulnerability factors to sexual disorders in both men and women. The SDBQ may be useful in both clinical practice and educational programs.

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Development

The SDBQ was developed based on an assortment of specific stereotypes and beliefs presented in the clinical literature as predisposing factors to the development and maintenance of the different male and female sexual dysfunctions.

The validation study used a community sample of 360 people (154 females and 206 males) and a clinical sample of 96 people with sexual dysfunction (49 males and 47 females). Both male and female versions of the SDBQ were submitted to factor analysis (Nobre, Pinto-Gouveia, & Gomes, 2003). A principal components analysis with varimax rotation of the female version identified six factors accounting for 43 percent of the total variance: (a) Sexual Conservatism, (b) Sexual Desire and Pleasure as a Sin, (c) Age-Related Beliefs, (d) Body-Image Beliefs, (e) Denying Affection Primacy, (f) Motherhood Primacy (see Table 1).

The principal component analysis with varimax rotation of the SDBQ male version identified six factors that accounted for 49 percent of the total variance (Nobre, Pinto-Gouveia, & Gomes, 2003): (a) Sexual Conservatism, (b) Female Sexual Power, (c) "Macho" Belief, (d) Beliefs About Women's Sexual Satisfaction, (e) Restricted Attitude Toward Sexual Activity, (f) Sex as an Abuse of Men's Power (see Table 2).

Response Mode and Timing

Participants may respond to the SDBQ using paper and pencil or computer. The response scales are Likert-type. Respondents are asked to identify the degree of concordance with 40 statements regarding diverse sexual issues, from 1 (*completely disagree*) to 5 (*completely agree*). Respondents take an average of 10 minutes to complete the SDBQ.

TABLE 1
Domain and Total Scores of the SDBQ (Female Version)

	Domains	Item Numbers	Min	Max
F1	Sexual Conservatism	2, 4, 7, 13, 14, 17, 27, 28, 32	9	45
F2	Sexual Desire and Pleasure as a Sin	15, 34, 35, 36, 37, 39	6	30
F3	Age-Related Beliefs	5, 6, 8, 11, 20	5	25
F4	Body-Image Beliefs	10, 12, 38, 40	4	20
F5	Denying Affection Primacy	1, 3, 18, 22, 23, 24	6	30
F6	Motherhood Primacy	26, 30, 31, 33	4	20
Total			34	170

Note. Items 1, 3, 22, 23, and 24 are scored in reverse order. Items 9, 16, 19, 21, 25, and 29 are not computed in the subscales of the female SDBQ for scoring purposes (for a detailed description please see Nobre, Pinto-Gouveia, & Gomes, 2003). The scale can be used with or without these items depending on their relevance within its application context (e.g., clinical context).

Scoring

Scoring information is presented in Tables 1 and 2. An index of dysfunctional sexual beliefs might be calculated by summing all SDBQ items (after reversing the scores of the inverted items).

Reliability

Internal consistency of the instrument was assessed by calculating the Cronbach's alpha statistic for the total scale and also for each dimension of both male and female versions. Results for the total scale ($\alpha = .93$ for the male and $\alpha = .81$ for the female version) supported the high internal consistency of the SDBQ. The Cronbach's alpha for each dimension of the SDBQ ranged from .50 to .89 for the female version and from .54 to .89 for the male version (Nobre, Pinto-Gouveia, & Gomes, 2003).

Subsequent studies with the SDBQ have indicated high internal consistency of the measure. Specifically, for the female version, an α of .97 for the total scale and α values for the subscales ranging from .60 to .97 were generated (Abdolmanafi et al., 2016). Also with the female version, in a Canadian undergraduate sample, the α for the total scale was .91 (Morton & Gorzalka, 2013). Among men, the SDBQ generated an α of .93 for the total scale (Clarke, Marks, & Lykins, 2015); another study found α values for the subscales ranging from .65 to .80 (Carvalho & Nobre, 2011). In a study comparing women with Persistent Genital Arousal Disorder with a control group, the α was .73 for the total sample (Carvalho, Veríssimo, & Nobre, 2013). Among a sample of asexual individuals and matching sexual controls, the female version of the SQBQ demonstrated α values ranging from .87 to .89

TABLE 2
Domain and Total Scores of the SDBQ (Male Version)

	Domains	Item Numbers	Min	Max
F1	Sexual Conservatism	2, 5, 9, 18, 21, 24, 25, 26, 32, 33	10	50
F2	Female Sexual Power	11, 15, 19, 27, 29, 38, 39, 40	8	40
F3	"Macho" Belief	1, 4, 6, 17, 28, 31, 37	7	35
F4	Beliefs About Women's Satisfaction	3, 7, 16, 35, 36	5	25
F5	Restrictive Attitude Toward Sex	8, 12, 13, 30	4	20
F6	Sex as an Abuse of Men's Power	10, 22, 34	3	15
Total			37	185

Note. Item 37 is scored in reverse order. Items 14, 20, and 23 are not computed in the subscales of the male SDBQ for scoring purposes (for a detailed description please see Nobre, Pinto-Gouveia, & Gomes, 2003). The scale can be used with or without these items depending on their relevance within its application context (e.g., clinical context).

for the asexual participants and from .69 to .77 for the controls. The male version of the SDBQ indicated values ranging from .76 to .82 for the asexual participants and values ranging from .69 to .79 for controls (Carvalho, Lemos, & Nobre, 2016). Additionally, in comparative studies between heterosexual individuals and gay men and lesbian women, the male SDBQ version generated an α of .73 for the gay participants and an α of .71 among heterosexual men. The female SDBQ version demonstrated alpha values ranging from .68 to .89 for the lesbian participants and alpha values ranging from .70 to .88 among heterosexual women (Peixoto & Nobre, 2014, 2017).

Test–retest reliability for both male and female versions was assessed by computing Pearson product-moment correlations between two consecutive administrations of the questionnaires with a four-week interval. Both male and female versions presented statistically significant results ($p < .05$) for the total scale ($r = .73$, $n = 10$ and $r = .80$, $n = 26$ respectively), demonstrating that the instrument presented good stability over time (Nobre, Pinto-Gouveia, & Gomes, 2003).

Validity

Our analysis of convergent validity indicated that the SDBQ is associated with validated measures of sexual and more general beliefs, as well as with measures of sexual functioning (Nobre, Pinto-Gouveia, & Gomes, 2003). Our findings showed statistically significant correlations between the SDBQ and the Sexual Beliefs and Information Questionnaire (SBIQ; Adams et al., 1996). The SDBQ also correlated significantly with the Female Sexual Function Index (FSFI; Rosen et al., 2000) and the International Index of Erectile Function (IIEF; Rosen et al., 1997).

Other Information

Adapted and validated versions of the SDBQ for different countries and languages are available, and ongoing adaptation and validation studies are being conducted, including: Portuguese, Brazilian Portuguese, English, Spanish, Italian (Nimbi, Tripodi, Simonelli, & Nobre, 2018), Romanian (Pop, Iclozan, Costea-Bărluțiu, & Rusu, 2016), Turkish (Ejder Apay, Özorhan, Arslan, Özkan, Koc, & Özbey, 2015), Iranian (Abdolmanafi et al., 2015), Dutch, and German. For more information regarding the SDBQ and permission for its use, please contact Pedro J. Nobre (pnobre5@gmail.com).

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Exhibit

Sexual Dysfunctional Beliefs Questionnaire

Gender

○ Male
○ Female

Male Version

The list presented below contains statements related to sexuality. Please read each statement carefully and select the number in the right-hand column which corresponds to the extent to which you agree or disagree with each statement (select only one option per statement), from 1 (completely disagree) to 5 (completely agree). There are no wrong or right answers, but it is very important that you be honest and that you answer all items.

	1 Completely Disagree	2 Disagree	3 Don't Disagree or Agree	4 Agree	5 Completely Agree
1. A real man has sexual intercourse very often.	○	○	○	○	○
2. Orgasm is possible only by vaginal intercourse.	○	○	○	○	○
3. Penile erection is essential for a woman's sexual satisfaction.	○	○	○	○	○
4. Homosexuality is a sickness.	○	○	○	○	○
5. A woman has no other choice but to be sexually subjugated by a man's power.	○	○	○	○	○
6. A real man must wait the necessary amount of time to sexually satisfy a woman during intercourse.	○	○	○	○	○
7. A woman may have doubts about a man's virility when he fails to get an erection during sexual activity.	○	○	○	○	○
8. Repeated engagement in oral or anal sex can cause serious health problems.	○	○	○	○	○
9. A shorter duration of intercourse is a sign of a man's power.	○	○	○	○	○
10. Sex is an abuse of a male's power.	○	○	○	○	○
11. The consequences of a sexual failure are catastrophic.	○	○	○	○	○
12. Women only pay attention to attractive younger men.	○	○	○	○	○
13. It is not appropriate to have sexual fantasies during sexual intercourse.	○	○	○	○	○
14. There are certain universal rules about what is normal during sexual activity.	○	○	○	○	○
15. In bed the woman is the boss.	○	○	○	○	○
16. Men who are not capable of penetrating women can't satisfy them sexually.	○	○	○	○	○
17. In sex, getting to the climax is most important.	○	○	○	○	○
18. In sex, anything but vaginal intercourse is unacceptable.	○	○	○	○	○
19. A woman's body is her best weapon.	○	○	○	○	○
20. A woman may stop loving a man if he is not capable of satisfying her sexually.	○	○	○	○	○
21. Vaginal intercourse is the only legitimate type of sex.	○	○	○	○	○
22. The quality of the erection is what most satisfies women.	○	○	○	○	○
23. A successful career implies the control of sexual urges.	○	○	○	○	○
24. Foreplay is a waste of time.	○	○	○	○	○
25. Sex is meant only for procreation.	○	○	○	○	○
26. In sex, the quicker/faster the better.	○	○	○	○	○
27. People who don't control their sexual urges are more easily controlled by others.	○	○	○	○	○

28. A real man is always ready for sex and must be capable of satisfying any woman.	○	○	○	○	○
29. If a man lets himself go sexually he is under a woman's control.	○	○	○	○	○
30. Anal sex is a perverted activity.	○	○	○	○	○
31. A man must be capable of maintaining an erection until the end of any sexual activity.	○	○	○	○	○
32. There is only one acceptable way of having sex (missionary position).	○	○	○	○	○
33. Sexual intercourse before marriage is a sin.	○	○	○	○	○
34. Sex is a violation of a woman's body.	○	○	○	○	○
35. A man who doesn't sexually satisfy a woman is a failure.	○	○	○	○	○
36. Whenever the situation arises, a real man must be capable of penetration.	○	○	○	○	○
37. Sex can be good even without orgasm.	○	○	○	○	○
38. A real man doesn't need much stimulation to reach orgasm.	○	○	○	○	○
39. A woman at her sexual peak can get whatever she wants from a man.	○	○	○	○	○
40. The greater the sexual intimacy, the greater the potential for getting hurt.	○	○	○	○	○

Female Version

The list presented below contains statements related to sexuality. Please read each statement carefully and select the number in the right-hand column which corresponds to the extent to which you agree or disagree with each statement (select only one option per statement), from 1 (completely disagree) to 5 (completely agree). There are no wrong or right answers, but it is very important that you be honest and that you answer all items

	1 Completely Disagree	2 Disagree	3 Don't Disagree or Agree	4 Agree	5 Completely Agree
1. Love and affection from a partner are necessary for good sex.	○	○	○	○	○
2. Masturbation is wrong and sinful.	○	○	○	○	○
3. The most important component of sex is mutual affection.	○	○	○	○	○
4. The best gift a woman could bring to marriage is her virginity.	○	○	○	○	○
5. After menopause women lose their sexual desire.	○	○	○	○	○
6. Women who have sexual fantasies are perverted.	○	○	○	○	○
7. Masturbation is not a proper activity for respectable women.	○	○	○	○	○
8. After menopause women can't reach orgasm.	○	○	○	○	○
9. There are a variety of ways of getting pleasure and reaching orgasm.	○	○	○	○	○
10. Women who are not physically attractive can't be sexually satisfied.	○	○	○	○	○
11. In the bedroom the man is the boss.	○	○	○	○	○
12. A good mother can't be sexually active.	○	○	○	○	○
13. Reaching climax/orgasm is acceptable for men but not for women.	○	○	○	○	○
14. Sexual activity must be initiated by the man.	○	○	○	○	○
15. Sex is dirty and sinful.	○	○	○	○	○
16. Simultaneous orgasm for two partners is essential for a satisfying sexual encounter.	○	○	○	○	○
17. Orgasm is possible only by vaginal intercourse.	○	○	○	○	○
18. The goal of sex is for men to be satisfied.	○	○	○	○	○

19.	A successful professional career implies control of sexual behavior.	○	○	○	○	○
20.	As women age the pleasure they get from sex decreases.	○	○	○	○	○
21.	Men only pay attention to young, attractive women.	○	○	○	○	○
22.	Sex is a beautiful and pure activity.	○	○	○	○	○
23.	Sex without love is like food without flavor.	○	○	○	○	○
24.	As long as both partners consent, anything goes.	○	○	○	○	○
25.	Any woman who initiates sexual activity is immoral.	○	○	○	○	○
26.	Sex is meant only for procreation.	○	○	○	○	○
27.	Sexual intercourse during menstruation can cause health problems.	○	○	○	○	○
28.	Oral sex is one of the biggest perversions.	○	○	○	○	○
29.	If women let themselves go sexually they are totally under men's control.	○	○	○	○	○
30.	Being nice and smiling at men can be dangerous.	○	○	○	○	○
31.	The most wonderful emotions that a woman can experience are maternal feelings.	○	○	○	○	○
32.	Anal sex is a perverted activity.	○	○	○	○	○
33.	In the bedroom the woman is the boss.	○	○	○	○	○
34.	Sex should happen only if a man initiates.	○	○	○	○	○
35.	There is just one acceptable way of having sex (missionary position).	○	○	○	○	○
36.	Experiencing pleasure during sexual intercourse is not acceptable in a virtuous woman.	○	○	○	○	○
37.	A good mother must control her sexual urges.	○	○	○	○	○
38.	An ugly woman is not capable of sexually satisfying her partner.	○	○	○	○	○
39.	A woman who only derives sexual pleasure through clitoral stimulation is sick or perverted.	○	○	○	○	○
40.	Pure girls don't engage in sexual activity.	○	○	○	○	○

Sexual Modes Questionnaire

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The Sexual Modes Questionnaire (SMQ; Nobre & Pinto-Gouveia, 2003) assesses the interaction among cognitions, emotions, and sexual responses.

The SMQ is a self-report measure, with a male and a female version that can be used in clinical and nonclinical samples. It is composed of three interdependent subscales: the *Automatic Thought* (*AT*) subscale, the *Emotional Response* (*ER*) subscale, and the *Sexual Response* (*SR*) subscale. The *AT* subscale is composed of 30 items (male) or 33 items (female) assessing automatic thoughts and images experienced by the participants during sexual activity. The *ER* subscale is composed of 30 items (male) or 33 items (female) evaluating emotions that the respondents experience during sexual activity. Respondents are given a list of 10 emotions to select from in evaluating their responses to the *AT* items. The *SR* subscale is

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composed of 30 items (male) or 33 items (female) measuring subjective sexual responses pertaining to the items of the *AT* subscale.

Development

A total of 456 subjects (201 females, 255 males) participated in the validation study. We used a community sample of 360 people (154 females, 206 males) and a clinical sample of 96 people with sexual dysfunction (47 females and 49 males).

Thoughts included in the *AT* scale were selected based on their theoretical and clinical relevance. For the male version we generated items pertaining to sexual performance thoughts (especially the erectile response), thoughts of potential failure, sexually negative or conservative thoughts toward sexuality, and thoughts about the negative impact of age on sexual functioning. We generated items for the female version to assess failure and disengagement thoughts, low body-image thoughts, sexual abuse thoughts, thoughts about a partner's lack of affection, and sexual passivity and control thoughts.

Both versions (male and female) of the *AT* subscale were submitted to factor analysis. We conducted a principal components analysis with varimax rotation of the female version, identifying six factors accounting for 53.1 percent of the total variance: (a) Sexual Abuse Thoughts, (b) Failure and Disengagement Thoughts, (c) Partner's Lack of Affection, (d) Sexual Passivity and Control, (e) Lack of Erotic Thoughts, and (f) Low Self Body-Image Thoughts (see Table 1).

In the male version, we conducted a principal components analysis that identified five factors accounting for 54.7 percent of the total variance: (a) Failure Anticipation Thoughts, (b) Erection Concern Thoughts, (c) Age and Body Function-Related Thoughts, (d) Negative Thoughts Toward Sex, and (e) Lack of Erotic Thoughts (see Table 2).

The items included in the *ER* and *SR* scales were directly connected to the items of the *AT* scale. For each automatic thought, subjects indicate their emotional response in a list of 10 emotions (worry, sadness, disillusion, fear, guilt, shame, anger, hurt, pleasure, satisfaction) and the intensity of their subjective sexual arousal.

Response Mode and Timing

Using Likert-type scales, the participants may respond to the SMQ using paper and pencil or computer. Respondents begin with the *AT* subscale by rating how frequently they experience each of the automatic thoughts during sexual activity, from 1 (*never*) to 5 (*always*). Respondents then check from the list of 10 emotions those that they usually experience whenever they engage in each automatic thought. Finally, respondents rate the intensity of their subjective sexual arousal, from 1 (*very low*) to 5 (*very high*), when related to their previous thoughts and emotions.

Scoring

Scoring for the male and female *AT* subscales is presented in Tables 1 and 2. An index of negative automatic thoughts may be calculated by summing all automatic thought items (thoughts related to erotic cues are scored in reverse order; see Table 1).

An index for each emotional response may be calculated using the following formula: total number of each emotion endorsed / total number of emotions endorsed. The emotional response index ranges from 0.0 to 1.0.

An index of sexual response may be calculated using the following formula: sum of the sexual response for each item / total number of sexual response items endorsed. The sexual response index ranges from 1 to 5.

TABLE 1
Items, Minimums, and Maximums of Female AT Factors and Totals

Factors	Item number	Minimum	Maximum
F1 Sexual Abuse Thoughts	1, 2, 3, 4, 6, 15, 32, 33	8	40
F2 Failure/Disengagement Thoughts	19, 22, 26, 30	4	20
F3 Partner's Lack of Affection	7, 12, 24, 27, 28	5	25
F4 Sexual Passivity and Control	10, 14, 17, 21, 23, 29	6	30
F5 Lack of Erotic Thoughts	5, 8, 11, 25, 31	5	25
F6 Low Self Body-Image Thoughts	9, 16, 20	3	15
Total		31	155

Note. Items 5, 8, 11, 25, and 31 are scored in reverse order. Items 13 and 18 are not computed in the subscales of the female SMQ for scoring purposes (for a detailed description please see Nobre & Pinto-Gouveia, 2003). The scale can be used with or without these items depending on their relevance within its application context (e.g., clinical context).

TABLE 2
Items, Minimums, and Maximums of the Male AT Factors and Totals

Factors	Item Numbers	Minimum	Maximum
F1 Failure Anticipation Thoughts	1, 2, 3, 4, 6, 7, 16	7	35
F2 Erection Concern Thoughts	5, 8, 9, 10, 11, 12, 29	7	35
F3 Age and Body- Related Thoughts	19, 21, 22, 28	4	20
F4 Negative Thoughts Toward Sex	20, 23, 24, 25, 30	5	25
F5 Lack of Erotic Thoughts	14, 17, 18, 26	4	20
Total		27	135

Note. Items 14, 17, 18, and 26 are scored in reverse order. Items 13, 15, and 27 are not computed in the subscales of the male SMQ for scoring purposes (for a detailed description please see Nobre & Pinto-Gouveia, 2003). The scale can be used with or without these items depending on their relevance within its application context (e.g., clinical context).

Reliability

Internal consistency of both male and female *AT* subscales was assessed using Cronbach's alpha for the total scales and for each factor separately. Results were high for male and female total scales ($\alpha = .88$ and $\alpha = .87$, respectively), showing the general consistency of the measures. For each factor, Cronbach's alpha statistics ranged from .71 to .80 for the female version and from .69 to .83 for the male version (Nobre & Pinto-Gouveia, 2003).

Test–retest reliability of the *AT* subscales was assessed by computing Pearson product-moment correlations between two consecutive administrations with a 4-week interval. Results from the female version show the stability of the measure across time, with a high correlation for the total scale ($r = .95$, $n = 31$, $p < .01$) and correlations for the specific dimensions ranging from $r = .52$, $p < .05$ to $r = .90$, $p < .01$. Results from the male version show a more moderate correlation between the two consecutive administrations ($r = .65$, $n = 27$, $p = .08$), with correlations for the several specific dimensions ranging from $r = .20$, $p < .05$ to $r = .95$, $p < .01$ (Nobre & Pinto-Gouveia, 2003).

Subsequent studies using the scale have demonstrated its applicability to populations from different cultural backgrounds, as well as to both clinical and nonclinical samples and heterosexual and non-heterosexual samples, replicating their high internal consistency values (ranging from .63 to .97; Carvalho & Nobre, 2011; Carvalho, Veríssimo, & Nobre, 2013; Cohen & Byers, 2014; Nobre, 2009, 2010; Nobre & Pinto-Gouveia, 2008a, 2008b; Peixoto & Nobre, 2016; Pereira, Oliveira, & Nobre, 2017; Tavares, Laan, & Nobre, 2017).

Validity

Convergent validity of the SMQ was assessed through the relationship with validated measures of sexual functioning in men (International Index of Erectile Function [IIEF]; Rosen et al., 1997) and women (Female Sexual Function Index [FSFI]; Rosen et al., 2000). Several statistically significant correlations were found between both versions of the SMQ and the FSFI and IIEF. The FSFI presented high negative correlations with the *AT* subscale, particularly F1, F2, and F5. The IIEF showed significant negative correlations with the *AT* subscale, particularly F1, F2, and F5 (Nobre & Pinto-Gouveia, 2003).

Regarding the *ER* subscale, FSFI was strongly negatively correlated with the emotions of sadness, guilt, and anger, and positively correlated with pleasure. For males, there were higher correlations between the IIEF and sadness, disillusionment, pleasure, and satisfaction (Nobre & Pinto-Gouveia, 2003, 2006).

We conducted a discriminant validity analysis, using a clinical group (men and women with sexual dysfunction) and a control group (matched men and women without sexual dysfunction). Our results indicated significant differences in the automatic thoughts, emotions, and sexual responses of clinical and control group participants of both sexes. The women in the clinical group presented significantly higher scores on F2, F5, and the total scale. The men in the clinical group presented significantly higher scores (compared to the control group) on F1, F2, and F5 (Nobre & Pinto-Gouveia, 2003, 2008b).

Other Information

The SMQ has been translated to and adapted for different languages and countries, with some of these adaptions ongoing, including Portuguese, Brazilian Portuguese, English, Spanish, Italian (Nimbi, Tripodi, Simonelli, & Nobre, 2018), Iranian (Abdolmanafi et al., 2017), Dutch, and Turkish. For more information regarding the SMQ and permission for its use, please contact Pedro J. Nobre (pnobre5@gmail.com).

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Exhibit

Sexual Modes Questionnaire

Male Version

The items presented below are a list of thoughts one can have during sexual activity. In the first column, please indicate the frequency with which you experience these *thoughts* by circling a number (1—Never to 5—Always). Next, indicate the *types of emotions* you typically experience when having these thoughts by marking an X in the columns for the appropriate emotions. Finally, in the last column, for each thought experienced indicate the intensity of your typical *sexual response* (arousal) while you are having that thought by circling a number (1—Very Low to 5—Very High).

Note: For thoughts that you indicate as never experiencing, you do not need to fill out the emotion or sexual response column.

Example: Imagine that the thought "Making love is wonderful" comes to your mind very often whenever you are engaged in a sexual activity, that this idea is accompanied by pleasurable emotions, and that your sexual arousal becomes very high. In this case your answer should be:

Thoughts						Emotions											Sexual Response				
Type of Thoughts			Frequency				Types of Emotions										Intensity				
	Never	Seldom	Sometimes	Often	Always	Worry	Sadness	Disillusioned	Fear	Guilt	Shame	Anger	Hurt	Pleasure	Satisfaction		Low Very	Low	Moderate	High	High Very
Example: Making love is wonderful	1	2	3	~~4~~	5									X			1	2	3	4	~~5~~

Thoughts						Emotions											Sexual Response				
Type of Thoughts			Frequency				Types of Emotions										Intensity				
	Never	Seldom	Sometimes	Often	Always	Worry	Sadness	Disillusioned	Fear	Guilt	Shame	Anger	Hurt	Pleasure	Satisfaction		Very Low	Low	Moderate	High	Very High
1. These movements and positions are fabulous	1	2	3	4	5												1	2	3	4	5
2. This time I cannot disappoint my partner	1	2	3	4	5												1	2	3	4	5
3. She will replace me with another guy	1	2	3	4	5												1	2	3	4	5
4. I'm condemned to failure	1	2	3	4	5												1	2	3	4	5
5. I must be able to have intercourse	1	2	3	4	5												1	2	3	4	5
6. This is not going anywhere	1	2	3	4	5												1	2	3	4	5
7. I'm not satisfying her	1	2	3	4	5												1	2	3	4	5
8. I must achieve an erection	1	2	3	4	5												1	2	3	4	5
9. I'm not penetrating my partner	1	2	3	4	5												1	2	3	4	5
10. My penis is not responding	1	2	3	4	5												1	2	3	4	5
11. Why isn't this working?	1	2	3	4	5												1	2	3	4	5

12.	I wish this could last longer	1	2	3	4	5										1	2	3	4	5
13.	What is she thinking about me?	1	2	3	4	5										1	2	3	4	5
14.	These movements and positions are fabulous	1	2	3	4	5										1	2	3	4	5
15.	What if others knew I'm not capable …?	1	2	3	4	5										1	2	3	4	5
16.	If I fail again I am a lost cause	1	2	3	4	5										1	2	3	4	5
17.	I'm the happiest man on earth	1	2	3	4	5										1	2	3	4	5
18.	This is turning me on	1	2	3	4	5										1	2	3	4	5
19.	If I don't climax now, I won't be able to later	1	2	3	4	5										1	2	3	4	5
20.	She is not being as affectionate as she used to	1	2	3	4	5										1	2	3	4	5
21.	She doesn't find my body attractive anymore	1	2	3	4	5										1	2	3	4	5
22.	I'm getting old	1	2	3	4	5										1	2	3	4	5
23.	This is disgusting	1	2	3	4	5										1	2	3	4	5
24.	This way of having sex is immoral	1	2	3	4	5										1	2	3	4	5
25.	Telling her what I want sexually would be unnatural	1	2	3	4	5										1	2	3	4	5
26.	She is really turned on	1	2	3	4	5										1	2	3	4	5
27.	I must show my virility	1	2	3	4	5										1	2	3	4	5
28.	It will never be the same again	1	2	3	4	5										1	2	3	4	5
29.	If I can't get an erection, I will be embarrassed	1	2	3	4	5										1	2	3	4	5
30.	I have other more important matters to deal with	1	2	3	4	5										1	2	3	4	5

Female Version

The items presented below are a list of thoughts one can have during sexual activity. In the first column, please indicate the frequency with which you experience these *thoughts* by circling a number (1—Never to 5—Always). Next, indicate the *types of emotions* you typically experience when having these thoughts by marking an X in the columns for the appropriate emotions. Finally, in the last column, for each thought experienced indicate the intensity of your typical *sexual response* (arousal) while you are having that thought by circling a number (1—Very Low to 5—Very High).

Note: For thoughts that you indicate as never experiencing, you do not need to fill out the emotion or sexual response column.

Example: Imagine that the thought "Making love is wonderful" comes to your mind often whenever you are engaged in a sexual activity, that this idea is accompanied by pleasurable emotions, and that your sexual arousal becomes very high. In this case your answer should be:

Thoughts						Emotions											Sexual Response				
Type of Thoughts			Frequency			Types of Emotions											Intensity				
	Never	Seldom	Sometimes	Often	Always	Worry	Sadness	Disillusioned	Fear	Guilt	Shame	Anger	Hurt	Pleasure	Satisfaction	Low Very	Low	Moderate	High	High Very
Example: Making love is wonderful	1	2	3	~~4~~	5									X		1	2	3	4	~~5~~

Thoughts						Emotions											Sexual Response Intensity				
Type of Thoughts			Frequency			Types of Emotions															
	Never	Seldom	Sometimes	Often	Always	Worry	Sadness	Disillusioned	Fear	Guilt	Shame	Anger	Hurt	Pleasure	Satisfaction	Very Low	Low	Moderate	High	Very High
1. He is abusing me	1	2	3	4	5											1	2	3	4	5
2. How can I get out of this situation?	1	2	3	4	5											1	2	3	4	5

3.	He only wants to satisfy himself	1	2	3	4	5										1	2	3	4	5
4.	Sex is all he thinks about	1	2	3	4	5										1	2	3	4	5
5.	The way he is talking turns me on	1	2	3	4	5										1	2	3	4	5
6.	He is violating me	1	2	3	4	5										1	2	3	4	5
7.	This way of having sex is immoral	1	2	3	4	5										1	2	3	4	5
8.	These movements and positions are fabulous	1	2	3	4	5										1	2	3	4	5
9.	I'm getting fat/ugly	1	2	3	4	5										1	2	3	4	5
10.	If I let myself go he is going to think I'm promiscuous	1	2	3	4	5										1	2	3	4	5
11.	Making love is wonderful	1	2	3	4	5										1	2	3	4	5
12.	He is not being as affectionate as he used to be	1	2	3	4	5										1	2	3	4	5
13.	I'm not satisfying my partner	1	2	3	4	5										1	2	3	4	5
14.	I must not show that I'm interested	1	2	3	4	5										1	2	3	4	5
15.	This is disgusting	1	2	3	4	5										1	2	3	4	5
16.	I'm not as physically attractive as I used to be	1	2	3	4	5										1	2	3	4	5
17.	I should not take the lead in sexual activity	1	2	3	4	5										1	2	3	4	5
18.	He only cares about me when he wants sex	1	2	3	4	5										1	2	3	4	5
19.	I'm not getting turned on	1	2	3	4	5										1	2	3	4	5
20.	I'm not feeling physically attractive	1	2	3	4	5										1	2	3	4	5
21.	These activities shouldn't be planned ahead of time	1	2	3	4	5										1	2	3	4	5
22.	I can't feel anything	1	2	3	4	5										1	2	3	4	5
23.	I don't want to get hurt emotionally	1	2	3	4	5										1	2	3	4	5
24.	Why doesn't he kiss me?	1	2	3	4	5										1	2	3	4	5
25.	My body turns him on	1	2	3	4	5										1	2	3	4	5
26.	When will this be over?	1	2	3	4	5										1	2	3	4	5
27.	If only he'd whisper something romantic in my ear	1	2	3	4	5										1	2	3	4	5
28.	He only loves me if I'm good in bed	1	2	3	4	5										1	2	3	4	5
29.	I should wait for him to make the first move	1	2	3	4	5										1	2	3	4	5
30.	I am only doing this because he asked me to	1	2	3	4	5										1	2	3	4	5
31.	I'm the happiest woman on earth	1	2	3	4	5										1	2	3	4	5
32.	I have other more important matters to deal with	1	2	3	4	5										1	2	3	4	5
33.	If I refuse to have sex, he will cheat on me	1	2	3	4	5										1	2	3	4	5

Questionnaire of Cognitive Schema Activation in Sexual Context

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The Questionnaire of Cognitive Schema Activation in Sexual Context (QCSASC; Nobre & Pinto-Gouveia, 2009a) assesses the activation of negative self-schemas to negative sexual events. The measure assesses the activation of these self-schemas (using a list proposed by Beck, 1995), following the presentation of four negative sexual events associated with the most common sexual dysfunctions in men and women. The QCSASC is a measure that might be clinically useful in helping to assess the role of cognitive variables on sexual functioning, and eventually contributing to a better understanding of cognitive processes underlying sexual problems.

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The first part of the QCSASC consists of the presentation of four sexual situations related to the most common sexual dysfunctions: desire disorder, erectile disorder, premature ejaculation, and orgasmic difficulties in the male version and desire disorder, subjective arousal difficulties, orgasmic problems, and vaginismus in the female version. Then participants indicate which emotions are aroused by the situations (worry, sadness, disillusion, fear, guilt, shame, anger, hurt, pleasure, and satisfaction) in order to assess the emotional response to the negative sexual events. After being asked to concentrate on the identified situations and emotions, participants complete a list of 28 self-statements reproducing the core beliefs or self-schemas proposed by Beck (1995). In total, the questionnaire includes 33 questions; five questions (the situation ratings and one emotion rating) followed by the 28 self-statements. However, the first five are not included in the calculation of the schema scores. The situation and emotion ratings work as activation scenarios for the 28 self-schemas.

Development

These four situations presented in the questionnaire in the form of vignettes were developed by a panel of sex therapists based on material from clinical cases.

The list of 28 self-schemas of the QCSASC was submitted to factor analysis (Nobre & Pinto-Gouveia, 2009a). A principal component analysis with varimax rotation identified five factors accounting for 62 percent of the total variance: (a) Undesirability/Rejection, (b) Incompetence, (c) Self-Deprecation, (d) Difference/Loneliness, and (e) Helpless (see Table 1).

Response Mode and Timing

Participants may respond to the QCSASC using paper and pencil or computer. The response scales are Likert-type. Respondents first indicate the negative event (if any) which is most similar to their sexual experience, and rate the frequency with which it usually happens, from 1 (*never happens*) to 5 (*happens often*). They are also asked to identify the emotions aroused by the situation (checking all that apply from a list of 10 emotions: worry, sadness, disillusion, fear, guilt, shame, anger, hurt, pleasure, and satisfaction). After being instructed to concentrate on the identified situation and emotions, they are asked to rate on a 5-point Likert-type scale the degree of concordance with 28 self-schemas. Respondents take an average of 10 minutes to complete the QCSASC.

TABLE 1
Items, Minimums, and Maximums of the QCSASC

Factors	Item Numbers	Minimum	Maximum
Undesirability/Rejection	20, 22, 24, 25, 29, 31, 32	7	35
Incompetence	7, 9, 13, 14, 15, 16, 18	7	35
Self-Deprecation	21, 26, 27	3	15
Difference/Loneliness	10, 28, 33	3	15
Helpless/Betrayed	6, 11	2	10
Total		22	110

Note. Items 8, 12, 17, 19, and 23 are not computed in the subscales of the QCSASC for scoring purposes (for a detailed description please see Nobre & Pinto-Gouveia, 2009a). The scale can be used with or without these items depending on their relevance within its application context (e.g., clinical context).

Scoring

Schema scores for the QCSASC are calculated by summing the schema items for the five domains and for the total scale. Higher scores reflect greater negative schema activation.

Reliability

Internal consistency was assessed using Cronbach's alpha statistics for the full scale and the different domains of the questionnaire. High inter-item correlations were observed for the subscales and the total scale. Cronbach's alpha values ranged from .59 (Difference/Loneliness) to .91 (Undesirability/Rejection), with the full scale α being .94. Except for the Difference/Loneliness and the Helpless domains, all other alpha results were higher than .71, supporting the homogeneity of the scale and the contribution from all the factors to the overall score (N = 26; Nobre & Pinto-Gouveia, 2009a).

Subsequent studies have also showed good internal consistency values of the scale. In a female sample, the α for the total scale was .96, and the α values for the domains ranged from .49 to .93 (Oliveira & Nobre, 2013). In a nonforensic sample of male community sexual aggressors, the α values of the QCSASC domains ranged from .53 to .93 (Carvalho, Quinta-Gomes, & Nobre, 2013). The measure has additionally been adapted for use with gay and lesbian samples. In these studies, the scale demonstrated α values ranging from .85 to .94 for the heterosexual women sample, and from .86 to .94 for the lesbian women sample (Peixoto & Nobre, 2015, 2017a), whereas for men, α values ranged from .92 to .96 for the heterosexual men sample and from .91 to .95 for the gay men sample (Peixoto & Nobre, 2015, 2017b).

Test–retest reliability was assessed by computing correlations for the total scale in two consecutive administrations of the questionnaire with a 4-week interval. The results ranged between r = .49 and r = .74 for the

specific domains, with the full scale presenting $r = .66$. Although some correlations were not so strong, all reliability coefficients were statistically significant ($N = 26$, $p < .01$). These results indicated a moderate stability of the scale over time (Nobre & Pinto-Gouveia, 2009a).

Validity

Convergent validity was assessed by correlating the QCSASC with validated measures oriented to assess cognitive structures linked to psychopathology: the Schema Questionnaire (SQ; Young, 1990) and the Sexual Self-Schema (SSS; Andersen & Cyranowski, 1994; Andersen, Cyranowski, & Espindle, 1999). The QCSASC was significantly correlated with the SQ, indicating that the measure assesses concepts that are partially related to more general cognitive schemas. Results regarding the relationship between the QCSASC and the Sexual Self-Schema Questionnaire showed moderate to high correlations, supporting our prediction that negative views about oneself as a sexual individual (particularly conservative ideas) would be related to the activation of negative self-schemas when facing unsuccessful sexual situations (Nobre & Pinto-Gouveia, 2009a).

Findings from the incremental validity analysis indicate that the QCSASC presents with higher clinical utility compared to already existing related measures (e.g., SQ, SSS). Partial correlations with measures of sexual functioning in men (IIEF) and women (FSFI) were higher for the QCSASC compared to the SQ and SSS, suggesting that this new measure presents a unique contribution for the explanation of sexual functioning beyond previous existing measures (Nobre & Pinto-Gouveia, 2009a).

A discriminant validity analysis was conducted, using a clinical sample (men and women with sexual dysfunction) and a control group (matched men and women without sexual dysfunction). We hypothesized that the higher the activation of negative cognitive schemas facing unsuccessful sexual situations, the greater the probability of developing a sexual dysfunction. Regarding women, we found statistically significant differences between clinical and control groups in three of the five domains of the QCSASC: Incompetence, Self-Deprecation, and Difference/Loneliness. Women with sexual dysfunction also scored significantly higher in the total QCSASC scale. Men with sexual dysfunction presented significantly higher scores, compared to the control group, on the Incompetence dimension, and the total scale (Nobre & Pinto-Gouveia, 2009b).

Other Information

The QCSASC is currently adapted for different languages and countries and additional adaption studies are currently ongoing. Versions include: English, Portuguese, Brazilian Portuguese, Persian, Turkish, Spanish, Dutch, and Italian (Nimbi, Tripodi, Simonelli, & Nobre, 2018). For more information regarding the QCSASC and permission for its use please contact Pedro J. Nobre (pnobre5@gmail.com).

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Exhibit

Questionnaire of Cognitive Schema Activation in Sexual Context

Gender

○ Male
○ Female

Female Version

Read carefully each one of the episodes presented below and indicate the extent to which they have ever happen to you by selecting a number (1 *Never* to 5 *Often*).

	1 Never Happened	2	3	4	5 Happened Often
1. I'm alone with my partner. He looks as if he wants to have sex, and he's going to extraordinary lengths to try to arouse me. However, I don't feel like it at all. So instead, I pretend to be tired and change the subject. Yet he persists. He looks disappointed, and says that I don't love him as much as I used to.	○	○	○	○	○
2. I'm having sex with my partner. He is really trying to arouse me, but I am experiencing no pleasure at all. Instead, I feel as if I am fulfilling an obligation. I ask myself, "Does it always have to be like this?"	○	○	○	○	○
3. My partner is touching me and I am very aroused. A few moments later he tries to penetrate me, but my vaginal muscles seem to clamp shut and my partner can't penetrate. He persists with no success, and what could have been an unforgettable moment turns into a frustrating experience.	○	○	○	○	○
4. My partner and I are engaged in foreplay, and he has tried different ways of stimulating me, which I'm enjoying. But in spite of it all I can't reach orgasm. My partner seems to be getting tired and I start to feel frustrated. I begin to feel anxious as I realize that the likelihood of reaching orgasm is becoming more and more remote.	○	○	○	○	○

5. Check all emotions you felt when you imagined the episode which more often happens to you.

☐ Worry
☐ Sadness
☐ Disillusionment
☐ Fear
☐ Guilt
☐ Shame
☐ Anger
☐ Hurt
☐ Pleasure
☐ Satisfaction

Keeping in mind the episode which more often happens to you, read the statements presented below carefully and select the degree to which they describe the way you think and feel about yourself (1 *Completely False* to 5 *Completely True*).

	1 Completely False	2 False	3 Sometimes True, Sometimes False	4 True	5 Completely True
6. I'm helpless.	○	○	○	○	○
7. I'm powerless.	○	○	○	○	○
8. I'm out of control.	○	○	○	○	○
9. I'm weak.	○	○	○	○	○
10. I'm vulnerable.	○	○	○	○	○
11. I'm needy.	○	○	○	○	○

12. I'm trapped.	○	○	○	○	○
13. I'm inadequate.	○	○	○	○	○
14. I'm ineffective.	○	○	○	○	○
15. I'm incompetent.	○	○	○	○	○
16. I'm a failure.	○	○	○	○	○
17. I'm disrespected.	○	○	○	○	○
18. I'm defective (less than others).	○	○	○	○	○
19. I'm not good enough (achieve).	○	○	○	○	○
20. I'm unlovable.	○	○	○	○	○
21. I'm unlikable.	○	○	○	○	○
22. I'm undesirable.	○	○	○	○	○
23. I'm unattractive.	○	○	○	○	○
24. I'm unwanted.	○	○	○	○	○
25. I'm uncared for.	○	○	○	○	○
26. I'm bad.	○	○	○	○	○
27. I'm unworthy.	○	○	○	○	○
28. I'm different.	○	○	○	○	○
29. I'm defective (not loved).	○	○	○	○	○
30. I'm not good enough (loved).	○	○	○	○	○
31. I'm bound to be rejected.	○	○	○	○	○
32. I'm bound to be abandoned.	○	○	○	○	○
33. I'm bound to be alone.	○	○	○	○	○

Male Version

Read carefully each one of the episodes presented below and indicate the extent to which they have ever happen to you by selecting a number (1 *Never* to 5 *Often*).

	1 Never Happened	2	3	4	5 Happened Often
1. I'm alone with my partner. She looks as if she wants to have sex, and she's going to extraordinary lengths to try to arouse me. However, I don't feel like it at all. So instead, I pretend to be tired and change the subject. Yet she persists. She looks disappointed, and says that I don't love her as much as I used to.	○	○	○	○	○
2. I'm caressing my partner, and she is enjoying it and seems to be ready for intercourse. Upon attempting penetration, I notice that my erection isn't as firm as it normally is and full penetration seems impossible. I try to no avail, and finally quit.	○	○	○	○	○
3. My partner is stimulating me, and I'm becoming very aroused. I'm getting very excited and I immediately try to penetrate her. I feel out of control and reach orgasm very quickly, at which point intercourse stops. She looks very disappointed, as if she expected much more from me.	○	○	○	○	○
4. I'm completely involved in lovemaking and I start to penetrate my partner. In the beginning everything is going fine, but time passes and I can't seem to reach orgasm. She seems to be getting tired. No matter how hard I try, orgasm seems to be farther and farther out of my reach.	○	○	○	○	○

5. Check all emotions you felt when you imagine the episode which more often happens to you

- ☐ Worry
- ☐ Sadness
- ☐ Disillusionment
- ☐ Fear
- ☐ Guilt
- ☐ Shame
- ☐ Anger
- ☐ Hurt
- ☐ Pleasure
- ☐ Satisfaction

Keeping in mind the episode which more often happens to you, read the statements presented below carefully and select the degree to which they describe the way you think and feel about yourself (1 *Completely False* to 5 *Completely True*).

	1 Completely False	2 False	3 Sometimes True, Sometimes False	4 True	5 Completely True
6. I'm helpless.	○	○	○	○	○
7. I'm powerless.	○	○	○	○	○
8. I'm out of control.	○	○	○	○	○
9. I'm weak.	○	○	○	○	○
10. I'm vulnerable.	○	○	○	○	○
11. I'm needy.	○	○	○	○	○
12. I'm trapped.	○	○	○	○	○
13. I'm inadequate.	○	○	○	○	○
14. I'm ineffective.	○	○	○	○	○
15. I'm incompetent.	○	○	○	○	○
16. I'm a failure.	○	○	○	○	○
17. I'm disrespected.	○	○	○	○	○
18. I'm defective (less than others).	○	○	○	○	○
19. I'm not good enough (achieve).	○	○	○	○	○
20. I'm unlovable.	○	○	○	○	○
21. I'm unlikable.	○	○	○	○	○
22. I'm undesirable.	○	○	○	○	○
23. I'm unattractive.	○	○	○	○	○
24. I'm unwanted.	○	○	○	○	○
25. I'm uncared for.	○	○	○	○	○
26. I'm bad.	○	○	○	○	○
27. I'm unworthy.	○	○	○	○	○
28. I'm different.	○	○	○	○	○
29. I'm defective (not loved).	○	○	○	○	○
30. I'm not good enough (loved).	○	○	○	○	○
31. I'm bound to be rejected.	○	○	○	○	○
32. I'm bound to be abandoned.	○	○	○	○	○
33. I'm bound to be alone.	○	○	○	○	○

Beliefs About Sexual Function Scale

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Existing measures of dysfunctional sexual beliefs focus not only on sexual function, but on different aspects of sexuality. This does not enable researchers to determine the specific role of beliefs about sexual function on sexual outcomes. Furthermore, these measures have different versions for men and women which does not allow for

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gendered comparisons. In order to overcome these shortcomings, we developed the Beliefs About Sexual Function Scale (BASEF; Pascoal, Alvarez, Pereira, & Nobre, 2017), a 15-item measure based on cognitive models of sexual function. This measure assesses the degree of agreement with inflexible statements about men and women's sexual function shared by men and women. The scale measures five sets of beliefs (*Anal Sex, Male Performance, Aging, Sexual Pain, Primacy of the Relationship*) that are aggregated into a common second level factor.

Development

Three strategies were followed to generate an initial pool of items for the BASEF concerning heterosexual sexual activity (Pascoal et al., 2017). Specifically, items were derived from three different sources: (a) the Sexual Dysfunctional Beliefs Questionnaire (Nobre, Gouveia, & Gomes, 2003); (b) a focus group held with five experienced colleagues in clinical sexology and sexual medicine, aimed at generating examples of beliefs about sexual functioning considered to play a role in creating vulnerability for sexual dysfunction; and (c) in line with recent research methods for content elicitation, an open-ended web-based question designed to elicit examples of beliefs about sexual functioning sent by colleagues from the focus group to lay people from their social network. A total of 221 statements were generated.

After checking for redundancy, 80 items were retained and aggregated according to the initial theoretical proposal. In order to establish content validity, the 80 items were available online and the link was sent to five experienced certified sex therapists who were invited to rate each item's relevance on a scale of 1 (*highly irrelevant*) to 4 (*extremely relevant*). A total of 51 items were considered for further analysis.

After the subsequent final adjustments concerning comprehensibility, the study's URL was launched online and advertised through social networks resulting in chain sampling. Data was collected for a period of four months with heterosexual people (Study 1). The same protocol was advertised again to test the measure's gender invariance with a sample of heterosexual people in committed dyadic relationships (Study 2).

In Study 1, an exploratory factor analysis using Principal Axis Factoring (PAF) with no rotation was run with a subsample (A) of heterosexual, sexually active men (n = 138; 50%) and women (n = 136; 50%), followed by an analysis with oblique rotation. Principal Axis Factoring was used, rather than principal components analysis, given the focus on latent constructs, which, in the case of the current study, were beliefs about sexual functioning. An oblique rotation, direct oblimin, was then used since the factors were expected to be correlated. Because our aim was to elaborate a belief scale as parsimonious as possible, but with good indicators of validity and reliability, we followed Bollen's criteria suggesting three items per factor is enough to have a good estimate of a latent variable. Criteria for factor retention were: eigenvalues > 1, scree plots analysis, and percentage of explained variance to identify the optimal solution. For item retention, a factor loading above .40 was used as a cut-off point, and items that presented a factor loading above .40 in one factor and above .30 in any other factor were excluded. After eliminating the items that did not meet these assumptions, the procedure of running PAF with oblique rotation was repeated. Based on this analysis, we obtained the best three items for each factor measured by the BASEF and determined the final version with five factors: Anal Sex, Male Performance, Aging, Sexual Pain, and Primacy of the Relationship.

A Confirmatory Factor Analysis (CFA) with a different subsample (B) of heterosexual sexually active men (n = 47; 41%) and women (n = 67; 59%) was conducted to investigate the fit of the final structure. All indicators of the goodness-of-fit for the proposed factor structure—chi square, Tucker-Lewis Index (TLI), comparative fit index (CFI) and root mean square error of approximation (RMSEA)—indicated a good model fit. The final structure of the BASEF was compared with an alternative factorial structure that considered a second level latent variable aggregating all the factors. Models were compared using the chi-square difference test. The results indicated that the best model is the second order model. The measure can be used as multifactorial or as a global measure (Pascoal et al., 2017).

Response Mode and Timing

People can answer in paper and pencil format or on a computer. Participants' answers should reflect their level of agreement with the 15 statements presented, using a scale from 1 (*Totally disagree*) to 5 (*Totally agree*) with higher values indicated stronger concordance with the sexual beliefs.

Scoring

There are no reverse scored items. The 15 items can be summed to create a global measure of dysfunctional sexual beliefs about sexual function ranging from 15 to 75, with higher levels of agreement indicating higher levels of dysfunctional beliefs about sexual function. The items from each subscale can be summed to create a total score for each subscale, ranging from 5 to 15. Items on each subscale are: *Anal Sex Beliefs* (1, 7, 14); *Male Performance Beliefs* (3, 5, 13); *Aging Beliefs* (2, 8, 11); *Sexual Pain Beliefs* (4, 6, 15); and *Primacy of the Relationship Beliefs* (9, 10, 12).

Reliability

The Cronbach's alpha for the total scale was .90. Cronbach's alphas for the subscales were: *Anal Sex Beliefs*, α = .83; *Male Performance Beliefs*, α = .67; *Aging Beliefs*, α =.69;

Sexual Pain Beliefs, α=.65; and *Primacy of the Relationship Beliefs*, α =.69. Even though some Cronbach's alphas are below the usual threshold of .70, these values are acceptable due to the fact that Cronbach's alpha is influenced by the number of items, and our measure has a small number of items (three) per subscale. Test–retest reliability after an eight-month period showed *r*s > .70 for the total scale and all subscales. The Cronbach's alpha was .77 in a study with adults recruited online ($N = 421$; Pascoal, Rosa, Silva, & Nobre, 2018). Participants were men and women who self-defined as cisgendered, heterosexual, and between the ages of 18 and 68 ($M = 27.55$, $SD = 9.35$).

Validity

The results demonstrated that BASEF is significantly correlated with male's sexual functioning measured by International Index of Erectile Function (Rosen et al., 1997; $r = –.24$, $p = .011$) as well as with women's sexual functioning measured by Female Sexual Function Index (Rosen et al., 2000; $r = –.20$, $p = .001$); establishing its concurrent validity. In Study 2, with a new sample of 407 participants who self-identified as heterosexual (men, $n = 129$), Confirmatory Factor Analysis demonstrated that factorial invariance across gender was confirmed. A freely estimated structure where no equality constraints are imposed on any of the parameters (configural model) was compared to a constrained structure in which subsequently the factor loadings and structural loadings (measurement model) were estimated to be equal between groups. The models were compared using the scaled chi-square difference test. The invariance of the scale between the groups was supported because the chi-square difference ($\Delta\chi^2$) test was non-significant.

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Exhibit

Beliefs About Sexual Function Scale

Below you will find a set of statements regarding sexual function. Please read each one and indicate your extent of your agreement or disagreement with each statement

	1 Totally disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Totally agree
1. Only gay men feel pleasure through anal stimulation.	○	○	○	○	○
2. As women age their sexual desire decreases.	○	○	○	○	○
3. A sexually competent man can make his partner have orgasms through vaginal penetration.	○	○	○	○	○
4. Pain during vaginal penetration indicates a lack of arousal.	○	○	○	○	○
5. Women are more satisfied if they have several orgasms in a sexual encounter.	○	○	○	○	○
6. Pain in sexual activity indicates a lack of sexual desire.	○	○	○	○	○
7. Women do not feel pleasure from anal sex.	○	○	○	○	○
8. Sexual pleasure decreases with age.	○	○	○	○	○
9. People who masturbate do so because they do not have satisfactory sex with their partners.	○	○	○	○	○
10. If one uses sex toys it is because one is sexually dissatisfied with one's partner.	○	○	○	○	○
11. Young people have more satisfying sex than older people.	○	○	○	○	○

12. If one feels sexual desire for other people it is because one is sexually dissatisfied with one's partner.	○	○	○	○	○
13. Men should maintain an erection for the time a woman requires to have multiple orgasms.	○	○	○	○	○
14. Only gay men feel aroused by anal stimulation.	○	○	○	○	○
15. Feeling pain in early penetration indicates that intercourse will go wrong.	○	○	○	○	○

Sexual Cognitions Checklist

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The Sexual Cognitions Checklist (SCC) was developed to assess sexual cognitions that are experienced as positive as well as those that are experienced as negative (Renaud, 1999). Most conceptual definitions and measures of sexual cognitions (often referred to as fantasies) assume that they are pleasant, enjoyable, and deliberate (Leitenberg & Henning, 1995); however, many individuals report having negative sexual thoughts that are experienced as ego-dystonic, unwanted, and personally unacceptable (Byers, Purdon, & Clark, 1998). To fully understand sexual cognitions, it is important to distinguish between those that are experienced as positive and those that are experienced as negative.

Development

The SCC consists of a checklist of 56 sexual cognitions. Forty of the items were taken from the Wilson Sex Fantasy Questionnaire (WSFQ; Wilson, 1988). The WSFQ has been used extensively in sexual fantasy research and has been found to have strong internal consistency ($\alpha = .98$). The remaining 16 items were taken from the Revised Obsessional Intrusions Inventory—Sex Version (ROII–v2), which also has demonstrated high internal consistency ($\alpha = .92$; Byers et al., 1998). For the SCC, the wording of some of the items was changed so that they could be experienced as either positive or negative. The SCC is appropriate for men and women of any age and sexual orientation.

Response Mode and Timing

The SCC can be administered individually, or in a group format, and takes approximately 30 minutes to complete. Respondents are first provided with definitions of positive and negative sexual cognitions. Positive sexual cognitions are defined as purposeful or non-purposeful cognitions that are experienced as acceptable and pleasant, are the types of thoughts one would expect to have, and might or might not result in sexual arousal. Negative sexual cognitions are defined as purposeful or non-purposeful cognitions that are experienced as highly unacceptable, upsetting, unpleasant, and repugnant, and might or might not result in sexual arousal. Participants then indicate how often they have had each of the listed sexual thoughts when it was a positive thought as well as when it was a negative thought on a scale ranging from 0 (*I have never had this thought*) to 6 (*I have this thought frequently during the day*).

The SCC also contains two nonoverlapping subscales, one reflecting themes of sexual dominance and one reflecting themes of sexual submission. To develop these subscales, six doctoral students in human sexuality independently rated each of the 56 sexual cognitions on the SCC as reflecting sexual submission, sexual dominance, both sexual submission and sexual dominance, or neither sexual submission nor sexual dominance. Six items were judged to have dominance but not submission themes and make up the dominance cognitions subscale. Ten items were judged to reflect submission but not dominance themes and make up the sexual submission subscale.

Scoring

The total frequency scores for *Positive Sexual Cognitions* (*POSCOG*) and *Negative Sexual Cognitions (NEGCOG*) are calculated by summing the item ratings for the 56

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items. Thus, scores range from 0 to 336, with higher scores indicating more frequent positive or negative cognitions. Scores on the *Positive Sexual Dominance* (*POSDOM*) and *Negative Sexual Dominance* subscales (*NEGDOM*) are determined by summing frequency ratings on the six dominance items (Items 11, 22, 27, 30, 39, and 48) such that scores range from 0 to 36. A similar procedure is used to calculate scores on the 10-item *Positive Sexual Submission* (*POSSUB*) and *Negative Sexual Submission* (*NEGSUB*) subscales, with scores ranging from 0 to 60 (Items 5, 6, 10, 19, 20, 23, 26, 31, 34, and 47).

Reliability

In a study of 148 female and 144 male undergraduate students, Renaud and Byers (1999) found high internal consistencies for the *POSCOG* and *NEGCOG* subscales for both men (α = .95 and .96, respectively) and women (α = .95 and .95, respectively). Byers and her colleagues (Byers, Nichols, & Voyer 2013; Byers, Nichols, Voyer, & Reilly, 2013) also found high internal consistency for the using two overlapping samples of adults with autism spectrum disorder (α = .95 and α = .96). Acceptable internal consistencies have also been found for men and women for *POSDOM* (α = .76 and .71, respectively), *NEGDOM* (α = .84 and .66, respectively), *POSSUB* (α = .81 and .80, respectively), and *NEGSUB* (α = .85 and .82, respectively; Renaud & Byers, 2005, 2006).

Validity

Renaud and Byers (1999) found that the sexual cognitions most commonly experienced as positive by individuals differed from those most commonly experienced as negative. The most commonly reported *POSCOG* revolved around themes of romance and intimacy, whereas the most commonly reported *NEGCOG* reflected themes of anonymous sex and sexual embarrassment. In addition, Renaud and Byers (2001) found that, compared to negative cognitions, positive cognitions were associated with more positive affect, less negative affect, more frequent subjective general physiological and sexual arousal, and less frequent upset stomach. They also found that positive sexual cognitions are more deliberate than are negative sexual cognitions and result in fewer attempts to control them. Further, in line with previous sexual fantasy research findings (Alfonso, Allison, & Dunn, 1992), a greater frequency of positive sexual cognitions is associated with better sexual adjustment, including more masturbation experience, a greater number of sexual partners, and greater sexual satisfaction (Renaud & Byers, 2001). Similarly, Byers, Nichols, and Voyer (2013) and Byers, Nichols, Voyer, and Reilly (2013) found that more frequent positive sexual cognitions were associated with a number of markers of positive sexual functioning. In contrast, when the frequency of positive cognitions was controlled, the frequency of negative sexual cognitions was not associated with sexual adjustment.

Renaud and Byers (2005, 2006) provided evidence for the validity of the dominance and submission subscales. Consistent with previous research (e.g., Gold & Clegg, 1990), self-reported use of sexual coercion was uniquely associated with the frequency of sexual dominance cognitions experienced as positive but not sexual dominance cognitions experienced as negative (Renaud & Byers, 2005). Consistent with prior research that had found that individuals who reported having been sexually abused as children reported fantasizing about being forced to have intercourse more often than did individuals without a history of child sexual abuse (Briere, Smiljanich, & Henschel, 1994), a greater frequency of positive sexual submission cognitions was uniquely associated with a history of child sexual abuse (Renaud & Byers, 2006).

Spanish Version

Moyano and Sierra (2012) developed a Spanish version of the SCC based on the English version which they called the Spanish Sexual Cognitions Checklist (SSCC). The Spanish version uses only 28 of the original items. These items were selected because they cluster into Wilson's (1988) four subscales: Intimate Relationships, Exploratory, Sadomasochistic, and Impersonal. Thus, the Spanish version does not include the range of sexual cognitions included in the English version. The authors have provided evidence for the content validity, factor structure, internal consistency, and validity of the scale (Moyano & Sierra, 2012, 2013; Moyano, Byers, & Sierra, 2016). The SSCC can be obtained from the authors.

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Exhibit

Sexual Cognitions Checklist

We all have thoughts about sex from time to time. Sexual thoughts can be divided into different types:

Positive Sexual Thoughts. Sometimes we experience our sexual thoughts as positive. Positive sexual thoughts may include thoughts that we purposely engage in to enhance our sexual feelings or sexual arousal. Positive sexual thoughts may also include thoughts that pop into our heads out of the blue. Whether we purposely engage in positive sexual thoughts, or they pop into our minds out of the blue, positive sexual thoughts are thoughts that we find *acceptable and pleasant.* They are the types of thoughts that we would expect to have. We can have positive sexual thoughts while we are engaging in masturbation, while we are engaged in sexual activity with a partner, and while we are involved in non-sexual activities.

Negative Sexual Thoughts. Sometimes, we have sexual thoughts that we experience as negative. Negative sexual thoughts are thoughts that we dislike having. They are the types of thoughts that we would not expect to have because they are uncharacteristic of our usual thoughts and habits. That is, negative sexual thoughts are thoughts of things we would never want to say or do. Therefore, negative sexual thoughts are *highly unacceptable, upsetting, and unpleasant.* We tend to find these thoughts disgusting and we wonder why we are having such repugnant thoughts. However, because they are sexual in content, we may experience sexual arousal to these thoughts even though we find them unacceptable, unpleasant, and upsetting. Like positive sexual thoughts, we can have negative sexual thoughts while we are engaging in masturbation, while we are engaged in sexual activity with a partner, and while we are involved in non-sexual activities.

This questionnaire deals with a variety of very common sexual thoughts. You will be asked to complete the same list twice. One time you will be asked to indicate how often you have experienced each thought as positive. The other time you will be asked to indicate how often you have experienced each thought as negative. Although some thoughts are clearly positive or clearly negative for us, there are some sexual thoughts that we experience as positive at times and as negative at other times depending on the specifics of the thought, your mood, or other factors.

In the past year, I have had *positive* sexual thoughts of:

	Never	Once or twice ever	A few times a year	Once or twice a month	Once or twice a week	Daily	Frequently during the day
1. Making love out of doors in a romantic setting (e.g., field of flowers; beach at night).	0	1	2	3	4	5	6
2. Having intercourse with a loved partner.	0	1	2	3	4	5	6
3. Having intercourse with someone I know but have not had sex with.	0	1	2	3	4	5	6
4. Having sex with an anonymous stranger.	0	1	2	3	4	5	6
5. Engaging in a sexual act with someone who has authority over me.	0	1	2	3	4	5	6
6. Being pressured into engaging in sex.	0	1	2	3	4	5	6

7.	Engaging in a sexual act with someone who is "taboo" (e.g., family member, religious figure).	0	1	2	3	4	5	6
8.	Having sex with two other people at the same time.	0	1	2	3	4	5	6
9.	Participating in an orgy.	0	1	2	3	4	5	6
10.	Being forced to do something sexually.	0	1	2	3	4	5	6
11.	Forcing someone to do something sexually.	0	1	2	3	4	5	6
12.	Engaging in sexual activity contrary to my sexual orientation (e.g., homosexual or heterosexual).	0	1	2	3	4	5	6
13.	Throwing my arms around and kissing an authority figure.	0	1	2	3	4	5	6
14.	Lifting my skirt or dropping my pants, thereby indecently exposing myself in public.	0	1	2	3	4	5	6
15.	Receiving oral sex.	0	1	2	3	4	5	6
16.	Giving oral sex.	0	1	2	3	4	5	6
17.	Watching others have sex.	0	1	2	3	4	5	6
18.	Having sex with an animal or non-human object.	0	1	2	3	4	5	6
19.	Being overwhelmed by a stranger's sexual advances.	0	1	2	3	4	5	6
20.	Being sexually victimized.	0	1	2	3	4	5	6
21.	Receiving or giving genital stimulation.	0	1	2	3	4	5	6
22.	Whipping or spanking someone.	0	1	2	3	4	5	6
23.	Being whipped or spanked.	0	1	2	3	4	5	6
24.	Taking someone's clothes off.	0	1	2	3	4	5	6
25.	Having my clothes taken off.	0	1	2	3	4	5	6
26.	Engaging in a sexual act which I would not want to do because it violates my religious principles.	0	1	2	3	4	5	6
27.	Forcing another adult to engage in a sexual act with me.	0	1	2	3	4	5	6
28.	Making love elsewhere than the bedroom (e.g., kitchen or bathroom).	0	1	2	3	4	5	6
29.	Being excited by material or clothing (e.g., rubber, leather, underwear).	0	1	2	3	4	5	6
30.	Hurting a partner.	0	1	2	3	4	5	6
31.	Being hurt by a partner.	0	1	2	3	4	5	6
32.	Partner-swapping.	0	1	2	3	4	5	6
33.	Being aroused by watching someone urinate.	0	1	2	3	4	5	6
34.	Being tied up.	0	1	2	3	4	5	6
35.	Masturbating in a public place.	0	1	2	3	4	5	6
36.	Authority figures (minister, boss) being naked.	0	1	2	3	4	5	6
37.	People I come in contact with being naked.	0	1	2	3	4	5	6
38.	Having sex in a public place.	0	1	2	3	4	5	6
39.	Tying someone up.	0	1	2	3	4	5	6
40.	Having incestuous sexual relations (sexual relations with a family member).	0	1	2	3	4	5	6
41.	Exposing myself provocatively.	0	1	2	3	4	5	6
42.	Wearing clothes of the opposite sex.	0	1	2	3	4	5	6
43.	Being promiscuous.	0	1	2	3	4	5	6

44.	Having sex with someone much younger than myself.	0	1	2	3	4	5	6
45.	Having sex with someone much older than myself.	0	1	2	3	4	5	6
46.	Being much sought after by the opposite sex.	0	1	2	3	4	5	6
47.	Being seduced as an "innocent."	0	1	2	3	4	5	6
48.	Seducing an "innocent."	0	1	2	3	4	5	6
49.	Being embarrassed by failure of sexual performance.	0	1	2	3	4	5	6
50.	Having sex with someone of a different race.	0	1	2	3	4	5	6
51.	Using objects for stimulation (e.g., vibrator, candles).	0	1	2	3	4	5	6
52.	Being masturbated to orgasm by a partner.	0	1	2	3	4	5	6
53.	Looking at obscene pictures or films.	0	1	2	3	4	5	6
54.	Kissing passionately.	0	1	2	3	4	5	6
55.	While engaging in a sexual act with my partner I have had sexual thoughts of saying something to my partner that I know would upset him/her.	0	1	2	3	4	5	6
56.	While engaging in a sexual act with my partner I have had sexual thoughts of doing. something to my partner that I know would upset him/her.	0	1	2	3	4	5	6

57. Any other sexual thought not listed above. (*specify*)

_____

In the past year, I have had *negative* sexual thoughts of:

		Never	Once or twice ever	A few times a year	Once or twice a month	Once or twice a week	Daily	Frequently during the day
1.	Making love out of doors in a romantic setting (e.g., field of flowers; beach at night).	0	1	2	3	4	5	6
2.	Having intercourse with a loved partner.	0	1	2	3	4	5	6
3.	Having intercourse with someone I know but have not had sex with.	0	1	2	3	4	5	6
4.	Having sex with an anonymous stranger.	0	1	2	3	4	5	6
5.	Engaging in a sexual act with someone who has authority over me.	0	1	2	3	4	5	6
6.	Being pressured into engaging in sex.	0	1	2	3	4	5	6
7.	Engaging in a sexual act with someone who is "taboo" (e.g., family member, religious figure).	0	1	2	3	4	5	6
8.	Having sex with two other people at the same time.	0	1	2	3	4	5	6
9.	Participating in an orgy.	0	1	2	3	4	5	6

10.	Being forced to do something sexually.	0	1	2	3	4	5	6
11.	Forcing someone to do something sexually.	0	1	2	3	4	5	6
12.	Engaging in sexual activity contrary to my sexual orientation (e.g., homosexual or heterosexual).	0	1	2	3	4	5	6
13.	Throwing my arms around and kissing an authority figure.	0	1	2	3	4	5	6
14.	Lifting my skirt or dropping my pants, thereby indecently exposing myself in public.	0	1	2	3	4	5	6
15.	Receiving oral sex.	0	1	2	3	4	5	6
16.	Giving oral sex.	0	1	2	3	4	5	6
17.	Watching others have sex.	0	1	2	3	4	5	6
18.	Having sex with an animal or non-human object.	0	1	2	3	4	5	6
19.	Being overwhelmed by a stranger's sexual advances.	0	1	2	3	4	5	6
20.	Being sexually victimized.	0	1	2	3	4	5	6
21.	Receiving or giving genital stimulation.	0	1	2	3	4	5	6
22.	Whipping or spanking someone.	0	1	2	3	4	5	6
23.	Being whipped or spanked.	0	1	2	3	4	5	6
24.	Taking someone's clothes off.	0	1	2	3	4	5	6
25.	Having my clothes taken off.	0	1	2	3	4	5	6
26.	Engaging in a sexual act which I would not want to do because it violates my religious principles.	0	1	2	3	4	5	6
27.	Forcing another adult to engage in a sexual act with me.	0	1	2	3	4	5	6
28.	Making love elsewhere than the bedroom (e.g., kitchen or bathroom).	0	1	2	3	4	5	6
29.	Being excited by material or clothing (e.g., rubber, leather, underwear).	0	1	2	3	4	5	6
30.	Hurting a partner.	0	1	2	3	4	5	6
31.	Being hurt by a partner.	0	1	2	3	4	5	6
32.	Partner-swapping.	0	1	2	3	4	5	6
33.	Being aroused by watching someone urinate.	0	1	2	3	4	5	6
34.	Being tied up.	0	1	2	3	4	5	6
35.	Masturbating in a public place.	0	1	2	3	4	5	6
36.	Authority figures (minister, boss) being naked.	0	1	2	3	4	5	6
37.	People I come in contact with being naked.	0	1	2	3	4	5	6
38.	Having sex in a public place.	0	1	2	3	4	5	6
39.	Tying someone up.	0	1	2	3	4	5	6
40.	Having incestuous sexual relations (sexual relations with a family member).	0	1	2	3	4	5	6
41.	Exposing myself provocatively.	0	1	2	3	4	5	6
42.	Wearing clothes of the opposite sex.	0	1	2	3	4	5	6
43.	Being promiscuous.	0	1	2	3	4	5	6
44.	Having sex with someone much younger than myself.	0	1	2	3	4	5	6
45.	Having sex with someone much older than myself.	0	1	2	3	4	5	6
46.	Being much sought after by the opposite sex.	0	1	2	3	4	5	6

47.	Being seduced as an "innocent."	0	1	2	3	4	5	6
48.	Seducing an "innocent."	0	1	2	3	4	5	6
49.	Being embarrassed by failure of sexual performance.	0	1	2	3	4	5	6
50.	Having sex with someone of a different race.	0	1	2	3	4	5	6
51.	Using objects for stimulation (e.g., vibrator, candles).	0	1	2	3	4	5	6
52.	Being masturbated to orgasm by a partner.	0	1	2	3	4	5	6
53.	Looking at obscene pictures or films.	0	1	2	3	4	5	6
54.	Kissing passionately.	0	1	2	3	4	5	6
55.	While engaging in a sexual act with my partner I have had sexual thoughts of saying something to my partner that I know would upset him/her.	0	1	2	3	4	5	6
56.	While engaging in a sexual act with my partner I have had sexual thoughts of doing. something to my partner that I know would upset him/her.	0	1	2	3	4	5	6

57. Any other sexual thought not listed above. (*specify*) _____

Maladaptive Cognitions About Sex Scale

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Rigid, polarized thoughts related to oneself, one's behavior, and one's social context form an important etiologic determinant of psychopathology. For instance, whereas believing that sex can help you sleep can be adaptive, believing that you cannot possibly fall asleep without sex is so rigid as to drive dysfunctional, and potentially personally harmful, behavior. In an attempt to identify the extent to which different maladaptive ways of thinking about sex might contribute to various forms of problematic hypersexuality (e.g., sexual compulsivity, hypersexual disorder, compulsive sexual behavior), we developed and refined the 11-item Maladaptive Cognitions About Sex Scale (MCASS; Pachankis, Rendina, Ventuneac, Grov, & Parsons, 2014) scale. The goal of this scale was to capture a range of rigid, polarized cognitions that might underlie the out-of-control sexual thoughts, feelings, and behaviors that characterize problematic hypersexuality. The 11 items capture three domains of maladaptive thinking about sex—magnified necessity of sex, disqualified benefits of sex, and minimized self-efficacy to control sexual thoughts and behaviors. Each item captures a cognition that is thought to become increasingly maladaptive as it

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becomes a predominant lens through which a person views sex. Consequently, each item is rated on a scale of increasing frequency from 1 (*Never*) to 5 (*All of the time*) with regards to how often the thought is experienced.

Development

Qualitative interviews from a pilot study of 60 highly sexually active (i.e., 9 or more male partners in 90 days) gay and bisexual men in New York City (Pachankis, Rendina, Ventuneac, Grov, & Parsons, 2014) were used to guide the development of the scale. During the qualitative interviews, participants were asked a variety of relevant questions, including their thoughts before, during, and after their most recent sexual encounter; how in control they felt of their own sexuality; and aspects of their sex lives that they liked and disliked. The transcripts were analyzed by an experienced clinical psychologist for content related to sexual thoughts and behaviors that participants experienced as being problematic. From there, a team of experts utilized an iterative free-listing response to generate a range of items to capture these types of problematic cognitions, which were ultimately grouped into three broad categories: (1) beliefs about the need to have sex; (2) beliefs that the harms of sex far outweighed the benefits; and (3) beliefs that one was unable to control sexual thoughts, fantasies, and behaviors. The list of items was sent to expert social and clinical psychologists for feedback, and a bank of 17 items was finalized.

The preliminary 17-item scale was administered to a new sample of 202 highly sexually active gay and bisexual men in New York City (Pachankis et al., 2014) as part of the *Pillow Talk* study. Confirmatory factor analyses supported the presence of the three theorized domains, and the subscales were labeled: (1) *Magnified Necessity*; (2) *Disqualified Benefits*; and (3) *Minimized Self-Efficacy*. Based on the results of the factor analyses, six items that led to model misfit for one of several reasons (i.e., low factor loadings, residual correlations, cross-loading) were removed, resulting in the final 11-item scale.

Response Mode and Timing

The MCASS can be self-administered in less than two minutes. Participants are prompted, "Please indicate how often you experience the following thoughts regarding sexual activity [with another man]." The text in brackets was utilized for our study, but can be omitted in studies where it is not applicable. To reduce bias, the ordering of the 11 items can be randomized.

Scoring

Each response option should be assigned a numerical score as follows: 1 (*Never*), 2 (*Rarely*), 3 (*Sometimes*), 4 (*Often*), and 5 (*All the time*). To compare subscale scores despite their unequal number of items, responses to relevant items should be averaged to form subscale scores for *Magnified Necessity* (Items 1 to 5), *Disqualified Benefits* (Items 6 to 8), and *Minimized Self-Efficacy* (Items 9 to 11). No responses are reverse-coded. Greater scores on each subscale indicate greater degrees of rigidity in each cognitive domain. Finally, as described in more detail below, there was no evidence for a higher-order factor that explains the associations among the subscales and thus no full-scale score should be calculated; that is, only subscale scores are valid.

Reliability

Our prior research with the scale indicates good internal consistency for the three subscales—*Magnified Necessity* ($\alpha = .83$), *Disqualified Benefits* ($\alpha = .83$), and *Minimized Self-Efficacy* ($\alpha = .90$). The scale is not expected to have strong stability over time, as these types of cognitions are malleable; thus, test–retest reliability may not be so critical for this measure. However, future research is needed to determine normative patterns of change over time. Nonetheless, in unpublished analyses conducted with 300 men in the *Pillow Talk* study who were assessed using the MCASS at baseline and 12 months later, the Pearson's correlations between scores at each time point were moderate in size—*Magnified Necessity* ($r = .61$), *Disqualified Benefits* ($r = .43$), and *Minimized Self-Efficacy* ($r = .50$).

Validity

We conducted a series of analyses within the initial scale development paper with 202 highly sexually active gay and bisexual men in New York City (Pachankis et al., 2014). Bivariate Pearson's correlations between each of the average subscale scores calculated using the instructions above suggested that the *Magnified Necessity* and *Disqualified Benefits* subscales were unassociated ($r = .06$, *ns*), whereas *Magnified Necessity* was moderately associated with *Minimized Self-Efficacy* ($r = .51$, $p < .001$) and *Disqualified Benefits* was weakly associated with *Minimized Self-Efficacy* ($r = .16$, $p < .05$).

We also tested a structural equation model based on the theorized association among the three subscales and problematic hypersexuality, operationalized as positive screening on the Hypersexual Disorder Screening Inventory (Pachankis et al., 2014; Parsons et al., 2019). Results supported the hypothesized model using latent versions of each subscale based on the confirmatory factor analysis described above. *Magnified Necessity* and *Disqualified Benefits* were unassociated with each other, and both *Magnified Necessity* ($\beta = .59$, $p < .001$) and *Disqualified Benefits* ($\beta = .19$, $p < .01$) significantly predicted *Minimized Self-Efficacy*, explaining 39 percent of its variance. *Magnified Necessity* ($\beta = .40$, $p < .001$), *Disqualified Benefits* ($\beta = .27$, $p < .01$), and *Minimized*

Self-Efficacy ($\beta = .26$, $p < .01$) all significantly and directly predicted higher likelihood of screening positive for problematic hypersexuality; both *Minimized Necessity* ($\beta = .16$, $p < .01$) and *Disqualified Benefits* ($\beta = .05$, $p < .05$) were also indirectly associated with problematic hypersexuality through *Minimized Self-Efficacy*. In total, the direct and indirect effects of the three subscales accounted for 45 percent of the variance in problematic hypersexuality.

To establish convergent validity, we examined bivariate associations between each of the three average subscales scores and impulsivity, emotion dysregulation, and anxiety/depression, each of which is characterized by maladaptive cognitions. Given that each is partially rooted in maladaptive patterns of thought but are general, rather than specific to sex like the MCASS, we expected moderate associations. In fact, we found that *Magnified Necessity* was moderately correlated with impulsivity, emotion dysregulation, and anxiety/depression ($r = .31$, $p < .001$; $r = .42$, $p < .001$; $r = .43$, $p < .001$, respectively*); Disqualified Benefits* was weakly correlated with each ($r = .23$, $p < .001$; $r = .18$, $p < .01$; $r = .21$, $p < .01$, respectively); and *Minimized Self-Efficacy* was moderately correlated with each ($r = .34$, $p < .001$; $r = .43$, $p < .001$; $r = .42$, $p < .001$, respectively).

Finally, to establish predictive validity, we conducted a binary logistic regression predicting screening positive for problematic hypersexuality, adjusting for factors that are well-established correlates of this outcome (i.e., HIV-positive status, sexual inhibition and excitation, impulsivity, emotion dysregulation, depression/anxiety, and sexual compulsivity). As previously established, the three average subscale scores were associated with each of these covariates, and thus only those effects that are independent of these previously established predictors of hypersexuality (including sexual compulsivity itself) would be expected to emerge as significant. In this model, we found that the *Disqualified Benefits* subscale—the least associated with the other variables in the model—was the only significant, independently associated MCASS subscale (AOR = 1.77, $p < .05$), with neither *Magnified Necessity* (AOR = 1.23, *ns*) nor *Minimized Self-Efficacy* (AOR = 1.08, *ns*) reaching the level of significance. HIV-positive status, depression/anxiety, and sexual compulsivity were the only other significant, independently associated variables in the model. Taken together, these findings suggest the three MCASS scales are meaningfully associated with other relevant constructs, demonstrating convergent validity, and that the *Disqualified Benefits* scale captures unique variance in problematic hypersexuality that is not currently captured by any prominently used measures to understand the etiology of hypersexuality, including those with nearly identical content (e.g., sexual compulsivity).

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Exhibit

Maladaptive Cognitions About Sex Scale

Please describe how often you experience the following thoughts regarding sexual activity

	1 Never	2 Rarely	3 Sometimes	4 Often	5 All the time
1. I need sex to calm me down when I am stressed.	○	○	○	○	○
2. I need sex to help me cope with boredom.	○	○	○	○	○
3. I need sex to help me concentrate.	○	○	○	○	○
4. I need sex to deepen my connections to others.	○	○	○	○	○
5. I need sex to relax.	○	○	○	○	○
6. Sex is a waste of time.	○	○	○	○	○
7. Sex leads to more harm than good.	○	○	○	○	○
8. Sex isn't worth the effort.	○	○	○	○	○
9. When a sexual image or fantasy enters my mind, I have a difficult time letting go of it.	○	○	○	○	○
10. Once I start thinking about sex, I have a difficult time stopping.	○	○	○	○	○
11. Just thinking about sex usually leads me to seek it out.	○	○	○	○	○

Sexual Thoughts Questionnaire

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The Sexual Thoughts Questionnaire (STQ) is a 30-item questionnaire that assesses self-reported thoughts during exposure to sexual stimuli in laboratory settings (Sigre-Leirós, Carvalho, & Nobre, 2016). The STQ may be particularly useful for investigating the role of cognitive factors in men and women's sexual arousal in a laboratory context using psychophysiological methods.

Development

This questionnaire was developed due to the lack of measures that allow assessment of thought content during exposure to sexually explicit material (SEM) and to test previous theoretical hypotheses on the role of thought content on sexual response based on studies conducted outside the laboratory (Nobre & Pinto-Gouveia, 2003; Nobre & Pinto-Gouveia, 2008). Thoughts included in the scale were selected based on their theoretical and clinical relevance. The items cover different topics such as sexual thoughts, distracting thoughts, performance and body image thoughts, and conservative and negative thoughts.

One hundred sixty-seven sexually healthy individuals (97 women and 70 men) participated in the validation study of the questionnaire (women, M_{age} = 23.5, SD = 4.09; men, M_{age} = 22.6, SD = 3.33). Principal components analysis with varimax rotation was performed to verify the factor structure of the STQ. The analysis merged data from women and men to assess their common dimensions and allow further comparison of their differences on self-reported thoughts during exposure to erotica. This analysis identified the following five factors accounting for 55.9 percent of the total variance: (1) *Sexual arousal thoughts*: dimension characterized by thoughts of sexual and erotic content, (2) *Distractive and disengaging thoughts*: domain represented by thoughts related to a lack of motivation and interest during exposure to erotica, (3) *Body image and performance thoughts*: factor reflecting thoughts of being uncomfortable with one's body image or sexual performance compared with the actors, (4) *Actresses' physical attractiveness thoughts*: dimension characterized by thoughts reflecting the sexual attractiveness of the actress, and (5) *Sinful and lack of affection thoughts*: domain represented by negative appraisal toward erotica and perception of lack of affection between actors.

The item selection for each factor was based on statistical criteria (loading > .4 on the respective factor) and on factor interpretability. One item (Item 3: "This is very artificial") loaded below .4 and was excluded. Item 14 ("My partner doesn't give me pleasure like that") also was excluded for loading higher than .4 in more than one factor. Moreover, Item 16 ("That man is really hot") was excluded from the body image and performance domain based on factor interpretability.

Response Mode and Timing

After the presentation of a sexually explicit film, participants are asked to answer the question: "To what extent did the following thoughts come to your mind during the sex clip?" Responses are assessed in a Likert-type scale, ranging from 0 (*never*) to 6 (*very frequently*). The scale typically takes less than 5 minutes to complete.

Scoring

All items are coded so that higher values indicate more frequent experience of each of the automatic thoughts

TABLE 1
Items, Minimums, and Maximums of the STQ Factors and Total

Factors	Item number	Minimum	Maximum
Sexual Arousal Thoughts	7, 13, 19, 20, 21, 23, 25, 27	0	48
Distractive and Disengaging Thoughts	8, 22, 24, 26, 28, 29, 30	0	42
Body Image and Performance Thoughts	9, 10, 11, 12	0	24
Actresses' Physical Attractiveness Thoughts	2, 5, 17	0	18
Sinful and Lack of Affection Thoughts	1, 4, 6, 15, 18	0	30
Total		0	162

Note. Items 3, 14, and 16 are not computed in the subscales of the STQ for scoring purposes (for a detailed description please see Sigre-Leirós, Carvalho, & Nobre, 2016). The scale can be used with or without these items depending on their relevance within its application context (e.g., clinical context).

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during exposure to SEM. An index of automatic thoughts may be calculated by summing all items. Specific scores for the five domains are computed by summing the items of each domain.

Reliability

Internal consistency was assessed using Cronbach's alpha for the five domains of the questionnaire. High inter-item correlations were observed within each factor. With the exception of the Sinful and Lack of Affection Thoughts dimension (α = .58), all other dimensions presented satisfactory to good levels of internal consistency (α = .79–.86; Sigre-Leirós et al., 2016).

Validity

To assess convergent validity, measurements of sexual arousal, namely subjective (self-report) and genital (physiological) response levels, were used. It was expected that the thoughts reported during exposure to erotica would be correlated with sexual arousal levels (mainly subjective arousal) assessed during the presentation of the erotic stimuli in women and men.

In women, subjective sexual arousal was significantly and positively associated with sexual arousal thoughts (r = .54, p < .001) and actress's physical attractiveness thoughts (r = .27, p < .01). Conversely, subjective arousal was significantly and negatively associated with the sinful and lack of affection thoughts domain (r = –.24, p < .05). No significant associations were found between the thought dimensions and genital response (Sigre-Leirós et al., 2016).

In men, subjective sexual arousal was significantly and positively associated with sexual arousal thoughts (r = .50, p < .001) and actress's physical attractiveness domains (r = .28, p < .05). Likewise, a significant negative correlation between subjective sexual arousal and the distractive and disengaging thoughts dimension was found (r = –.31, p < .01). No significant associations were found between thought dimensions and genital response (Sigre-Leirós et al., 2016).

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Exhibit

Sexual Thoughts Questionnaire

To what extent did the following thoughts come to your mind during the sex clip?

	0 Never	1	2	3	4	5	6 Very Frequently
1. This is disgusting.	○	○	○	○	○	○	○
2. That woman is amazing in bed.	○	○	○	○	○	○	○
3. This is very artificial.	○	○	○	○	○	○	○
4. This is immoral.	○	○	○	○	○	○	○
5. That woman really knows what men like.	○	○	○	○	○	○	○
6. I can't allow myself such things.	○	○	○	○	○	○	○
7. I'm getting excited.	○	○	○	○	○	○	○
8. I shouldn't be here.	○	○	○	○	○	○	○
9. I wish I had that body.	○	○	○	○	○	○	○
10. That man really knows what women like.	○	○	○	○	○	○	○
11. My body isn't as sexy as that one.	○	○	○	○	○	○	○
12. I can't be as good in bed.	○	○	○	○	○	○	○
13. This drives me crazy.	○	○	○	○	○	○	○
14. My partner doesn't give me pleasure like that.	○	○	○	○	○	○	○
15. This is very centered on penetration.	○	○	○	○	○	○	○

16. That man is really hot.	○	○	○	○	○	○	○
17. That woman is really hot.	○	○	○	○	○	○	○
18. There is no affection between them.	○	○	○	○	○	○	○
19. I feel like touching myself.	○	○	○	○	○	○	○
20. I would love being here with someone else.	○	○	○	○	○	○	○
21. I feel like doing this.	○	○	○	○	○	○	○
22. This is really boring.	○	○	○	○	○	○	○
23. This is really great.	○	○	○	○	○	○	○
24. This never ends.	○	○	○	○	○	○	○
25. I wouldn't mind being there.	○	○	○	○	○	○	○
26. This is a waste of time.	○	○	○	○	○	○	○
27. I'm enjoying being here.	○	○	○	○	○	○	○
28. I have more important things to do.	○	○	○	○	○	○	○
29. I could be doing other things.	○	○	○	○	○	○	○
30. This is unpleasant.	○	○	○	○	○	○	○

Sexual Awareness Questionnaire

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The Sexual Awareness Questionnaire (SAQ; Snell, Fisher, & Miller, 1991) is a self-report instrument designed to measure four personality tendencies associated with sexual awareness and sexual assertiveness: (a) *sexual consciousness*, defined as the tendency to think and reflect about the nature of one's sexuality; (b) *sexual preoccupation*, defined as the tendency to think about sex to an excessive degree; (c) *sexual monitoring*, defined as the tendency to be aware of the public impression which one's sexuality makes on others; and (d) *sexual assertiveness*, defined as the tendency to be assertive about the sexual aspects of one's life.

Development

Originally, the questionnaire items were subjected to a principal axis factor analysis with varimax rotation; four factors accounted for 42 percent of the variance; the factors were sexual consciousness, sexual monitoring, sexual assertiveness, and sex-appeal consciousness. A second cross-validation factor analysis supported this factor structure (Snell et al., 1991).

Response Mode and Timing

The SAQ has 36 items scored on a 5-point Likert scale: 0 (*not at all characteristic of me*), 1 (*slightly characteristic of me*), 2 (*somewhat characteristic of me*), 3 (*moderately characteristic of me*), and 4 (*very characteristic of me*). The scale requires about 15 to 30 minutes to complete and can be done via computer or pencil-and-paper.

Scoring

All of the SAQ items are coded so that A = 0; B = 1; C = 2; D = 3; and E = 4, except for six items which are reverse coded (Items 6, 9, 23, 30, 31, and 32). Next, the items on each subscale are summed, so that higher scores correspond to greater amounts of each respective psychological tendency. Note that not all 36 items are included in subscale calculations.

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Reliability

Originally, Cronbach's alpha coefficients were calculated using two separate samples from psychology courses at a U.S. university (Snell et al., 1991). The average age was 24 in both samples. Results indicated that subscales had acceptable levels of reliability (Table 1; Snell et al., 1991).

Research using U.S. college samples supported reliability of the sexual assertiveness subscale (α =.84; Yamamiya, Cash, & Thompson, 2006; α = .90; Bay-Cheng & Zucker, 2007; α = .89; Bay-Cheng & Fava, 2011) as well as the total scale score (α = .80; Lynn, Pipitone, & Keenan, 2014), and the total score among Canadian undergraduate students (α = .81; Muise, Preyde, Maitland, & Milhausen, 2010). Another sample of U.S. students reported alphas for sexual monitoring (α = .82 among women; α = .76 among men) and sexual consciousness (α =.87 among women; α = .85 among men; Smolak, Murnen, & Myers, 2014). Studies with U.S. college students have also used the sexual consciousness subscale alone: α = .87 (Preciado, Johnson, & Peplau, 2013), α = .82 (Katz & Schneider, 2015) and α = .87 (Bay-Cheng & Fava, 2011).

Cronbach's alpha was also found to be acceptable in a sample of girls (α = .84; Horne & Zimmer-Gembeck, 2006), and in a geographically broad sample of 851 men and women (Worthington, Navarro, Savoy, & Hampton, 2008): sexual consciousness (α = .77), sexual self-monitoring (α = .78), sexual preoccupation (α = .75), and sexual assertiveness (α = .93).

Validity

Snell et al. (1991) found that subscales were negatively related to measures of sex-anxiety and sex-guilt for males and females, and sexual-consciousness was related to erotophilic feelings. Women's and men's responses to the four SAQ subscales were related to their sexual attitudes, dispositions, and behaviors. Other findings indicated that men reported greater sexual assertiveness than women, with no gender differences found for sexual consciousness, sexual monitoring, or sex-appeal consciousness. Snell (1994) found that sexual assertiveness in males and females was predictive of greater contraceptive use; sexual consciousness and sexual monitoring predicted more favorable attitudes toward condom use for males. In addition, for females and males, sexual consciousness, sexual monitoring, and sexual assertiveness were positively associated with a greater variety and a more extensive history of sexual experiences.

Snell, Fisher, and Schuh (1992) found that the SAQ was positively associated with sexual-esteem. Another study showed similar correlations between subscales of the SAQ and sexual-esteem, sexual-depression and sexual preoccupation (Snell, Fisher, & Walters, 1993).

Total scores on the SAQ have been associated with number of partners (r = .42; Lynn et al., 2014). The sexual assertiveness subscale was correlated with ambivalent sexual decisions (r = –.17) and emotional disengagement during sex (r = –.33; Yamamiya et al., 2006). Horne and Zimmer-Gembeck (2006) found that the sexual consciousness subscale was associated with sexual body esteem (r = .35) and sexual self-reflection (r = .37).

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TABLE 1
Summary of Item Numbers, Score Ranges, and Reliability Coefficients of the SAQ from Snell et al. (1991)

Subscale	Items	Range	Cronbach's Alpha Sample I		Cronbach's Alpha Sample II	
			Male	Female	Male	Female
Sexual Consciousness	1, 4, 10, 13, 22, 25	0–24	.83	.86	.85	.88
Sexual Monitoring	2, 5, 14, 17, 23, 26, 28, 31, 32	0–36	.80	.82	.81	.82
Sex-appeal Consciousness	8, 11, 29	0–12	.89	.92	.92	.92
Sexual Assertiveness	3, 6, 9, 12, 15, 18, 24	0–28	.83	.81	.80	.85

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Exhibit

Sexual Awareness Questionnaire

The items listed below refer to the sexual aspects of people's lives. Please read each item carefully and decide to what extent it is characteristic of you. Give each item a rating of how much it applies to you by using the following scale:

	A *Not at all* characteristic of me	B *Slightly* characteristic of me	C *Somewhat* characteristic of me	D *Moderately* characteristic of me	E *Very* characteristic of me
1. I am very aware of my sexual feelings.	○	○	○	○	○
2. I wonder whether others think I'm sexy.	○	○	○	○	○
3. I'm assertive about the sexual aspects of my life.	○	○	○	○	○
4. I'm very aware of my sexual motivations.	○	○	○	○	○
5. I'm concerned about the sexual appearance of my body.	○	○	○	○	○
6. I'm not very direct about voicing my sexual desires.	○	○	○	○	○
7. I'm always trying to understand my sexual feelings.	○	○	○	○	○
8. I know immediately when others consider me sexy.	○	○	○	○	○
9. I am somewhat passive about expressing my sexual desires.	○	○	○	○	○
10. I'm very alert to changes in my sexual desires.	○	○	○	○	○
11. I am quick to sense whether others think I'm sexy.	○	○	○	○	○
12. I do not hesitate to ask for what I want in a sexual relationship.	○	○	○	○	○
13. I am very aware of my sexual tendencies.	○	○	○	○	○
14. I usually worry about making a good sexual impression on others.	○	○	○	○	○
15. I'm the type of person who insists on having my sexual needs met.	○	○	○	○	○
16. I think about my sexual. motivations more than most people do.	○	○	○	○	○
17. I'm concerned about what other people think of my sex appeal.	○	○	○	○	○
18. When it comes to sex, I usually ask for what I want.	○	○	○	○	○

19.	I reflect about my sexual desires a lot.	○	○	○	○	○
20.	I never seem to know when I'm turning others on.	○	○	○	○	○
21.	If I were sexually interested in someone, I'd let that person know.	○	○	○	○	○
22.	I'm very aware of the way my mind works when I'm sexually aroused.	○	○	○	○	○
23.	I rarely think about my sex appeal.	○	○	○	○	○
24.	If I were to have sex with someone, I'd tell my partner what I like.	○	○	○	○	○
25.	I know what turns me on sexually.	○	○	○	○	○
26.	I don't care what others think of my sexuality.	○	○	○	○	○
27.	I don't let others tell me how to run my sex life.	○	○	○	○	○
28.	I rarely think about the sexual aspects of my life.	○	○	○	○	○
29.	I know when others think I'm sexy.	○	○	○	○	○
30.	If I were to have sex with someone, I'd let my partner take the initiative.	○	○	○	○	○
31.	I don't think about my sexuality very much.	○	○	○	○	○
32.	Other people's opinions of my sexuality don't matter very much to me.	○	○	○	○	○
33.	I would ask about sexually-transmitted diseases before having sex with someone.	○	○	○	○	○
34.	I don't consider myself a very sexual person.	○	○	○	○	○
35.	When I'm with others, I want to look sexy.	○	○	○	○	○
36.	If I wanted to practice "safe sex" with someone, I would insist on doing so.	○	○	○	○	○

Aging Sexual Knowledge and Attitudes Scale

Charles B. White,[19] *Trinity University*

The Aging Sexual Knowledge and Attitudes Scale (ASKAS) is designed to measure two realms of sexuality: (a) knowledge about changes (and non-changes) in sexual response to advanced age in males and females and (b) general attitudes about sexual activity in the aged. The items are largely specific to the elderly rather than a general sexual knowledge-attitudes scale. The ASKAS was developed for use in assessing the impact of group or individual interventions on behalf of sexual functioning in the aged utilizing, for example, a pretest-posttest procedure. Further, the measure may form the basis for group and individual discussion about sexual attitudes and/or sexual knowledge. The scale is also appropriate for use in educational programs for those working with the aged.

The actual numerical scores may be conveniently used for research purposes, but the individual items are also useful to assess the extent of an individual's knowledge upon which to base clinical interventions, as well as identifying attitudinal obstacles to sexual intimacy in old age.

Response Mode and Timing

The ASKAS consists of 61 items, 35 true/false/don't know in format and 26 items responded to on a 7-point Likert-type scale as to degree of agreement or disagreement with the particular item. The 35 true/false questions assess knowledge about sexual changes and non-changes which are or are not age related. The 26 agree/disagree items

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assess attitudes toward sexual behavior in the aged. The items are counterbalanced. The instrument takes 20–40 minutes to complete.

Scoring

The ASKAS may be given in an interview or written format and may be group administered or individually administered. The nature of the scoring and items are readily adaptable to computer scoring systems. Scoring information is presented in Table 1.

In the Knowledge section, questions 1 through 35, the following scoring applies: 1 (*true*), 2 (*false*), and 3 (*don't know*). Scoring is such that a low knowledge score indicates high knowledge. The rationale for the low knowledge score reflecting high knowledge is that *don't know* was given a value of 3, indicating low knowledge. Items 1, 10, 14, 17, 20, 30, and 31 are reversed scored.

The Attitude Questions use a 7-point Likert-type scale ranging from 1 (*disagree*) to 7 (*agree*). Items 44, 47, 48, 50, 51, 52, 53, 54, 55, and 59 are reverse scored. A low score indicates a permissive attitude.

Reliability

The reliability of the ASKAS has been examined in several different studies, and in varying ways, summarized in Table 2. As can be seen, reliabilities are very positive and at acceptable levels.

Validity

Presented in Table 3 are the means and standard deviations of ASKAS scores from several studies. These means are not meant to be viewed as normative, but rather illustrative of group variation in ASKAS performance.

The validity of the ASKAS has been examined in a sexual education program for older persons, by individuals working with older persons, and by adult family members of aged persons in which each group received the psychological-educational intervention separately

TABLE 1
Scoring and Coding for Items 1 to 35

Item	Answer	Item	Answer	Item	Answer	Item	Answer	Item	Answer
1*	F	8	T	15	F	22	T	29	T
2	T	9	F	16	T	23	T	30*	F
3	T	10*	F	17*	F	24	T	31*	F
4	T	11	T	18	T	25	T	32	T
5	T	12	T	19	T	26	T	33	T
6	T	13	T	20*	F	27	T	34	T
7	T	14*	F	21	T	28	T	35	T

Note. Items with an asterisk should be reverse scored.

TABLE 2
Aging Sexual Knowledge and Attitudes Scale (ASKAS) Reliabilities

Type of reliability	Reliability coefficient	Sample size	Type of sample
Knowledge			
Split-half[a]	.91	163	Nursing home staff
Split-half[a]	.90	279	Nursing home residents
Alpha	.93	163	Nursing home staff
Alpha	.91	279	Nursing home residents
Alpha	.92	30	Community older adults
Alpha	.90	30	Nursing home staff
Alpha	.90	30	Families of older adults
Test–retest	.97	15	Community older adults
Test–retest	.90	30	Staff of nursing home and families of the older adults
Attitudes			
Split-half[a]	.86	163	Nursing home staff
Split-half[a]	.83	279	Nursing home residents
Alpha	.85	163	Nursing home staff
Alpha	.76	279	Nursing home residents
Alpha	.87	30	Community older adults
Alpha	.87	30	Nursing home staff
Alpha	.86	30	Families of older adults
Test–retest	.96	15	Community older adults
Test–retest	.72	30	Staff of nursing home and families of the aged

[a]These correlations have been corrected for test length.

TABLE 3
Aging Sexual Knowledge and Attitudes Scale (ASKAS) Score Means and Standard Deviations Score by Group

Group	*n*	*M*	*SD*
Nursing home residents[a]	273		
Attitudes		84.56	23.32
Knowledge		65.62	15.09
Community older adults[b]	30		
Attitudes		86.40	17.28
Knowledge		73.73	12.52
Families of older adults[b]	30		
Attitudes		75.00	22.66
Knowledge		78.00	13.61
Persons who work with older adults[b]	30		
Attitudes		76.00	17.60
Knowledge		62.46	12.50
Nursing home staff[b]	163		
Attitudes		61.08	25.79
Knowledge		64.19	17.25

Note. The possible range of ASKAS scores are as follows: Knowledge: 35–105; Attitudes: 26–182. All scores reported here are the pretest scores in cases where both pretests and posttests were administered.
[a]White (1981).
[b]White and Catania (1981).

(White & Catania, 1981). Each experimental group had a comparable nonintervention control group. In all cases, the educational intervention resulted in significant increases in knowledge and significant changes in the direction of a more permissive attitude, both relative to their own pretest scores and relative to the appropriate control group, whereas the control group posttest scores were not significantly changed relative to their pretest scores. There was a 4–6-week period between pretests and posttests.

Hammond (1979) utilized the ASKAS in a sexual education program for professionals working with the aged. She reported significant changes from pre- to posttest toward increased knowledge and more permissive attitudes in the interception group, as in the White and Catania (1981) research, whereas the control group scores were unchanged from pre- to posttest.

White (1982a), in a study of nursing home residents in 15 nursing homes, reported that both ASKAS attitude and knowledge scores were associated with whether an individual was sexually active or not such that more activity was associated with greater knowledge and with more permissive attitudes.

A factor analysis of the ASKAS results (White, 1982b) resulted in a two-factor solution, with each item loading most heavily on its hypothesized membership in either the attitude or knowledge section of the measure.

Other Information

The ASKAS may be utilized without permission. It is only requested that all findings be shared with the test author.

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Exhibit

Aging Sexual Knowledge and Attitudes Scale

Please indicate whether you think the following statements are true or false; you may also indicate that you do not know the answer.

	True	False	Don't know
1. Sexual activity in aged persons is often dangerous to their health.	○	○	○
2. Males over the age of 65 typically take longer to attain an erection of their penis than do younger males.	○	○	○
3. Males over the age of 65 usually experience a reduction in intensity of orgasm relative to younger males.	○	○	○
4. The firmness of erection in aged males is often less than that of younger persons.	○	○	○
5. The older female (65+ years of age) has reduced vaginal lubrication secretion relative to younger females.	○	○	○
6. The aged female takes longer to achieve adequate vaginal lubrication relative to younger females.	○	○	○
7. The older female may experience painful intercourse due to reduced elasticity of the vagina and reduced vaginal lubrication.	○	○	○
8. Sexuality is typically a life-long need.	○	○	○
9. Sexual behavior in older people (65+) increases the risk of heart attack.	○	○	○
10. Most males over the age of 65 are unable to engage in sexual intercourse.	○	○	○
11. The relatively most sexually active younger people tend to become the relatively most sexually active older people.	○	○	○
12. There is evidence that sexual activity in older persons has beneficial physical effects on the participants.	○	○	○
13. Sexual activity may be psychologically beneficial to older person participants.	○	○	○
14. Most older females are sexually unresponsive.	○	○	○
15. The sex urge typically increases with age in males over 65.	○	○	○
16. Prescription drugs may alter a person's sex drive.	○	○	○

17.	Females, after menopause, have a physiologically induced need for sexual activity.	○	○	○
18.	Basically, changes with advanced age (65+) in sexuality involve a slowing of response time rather than a reduction of interest in sex.	○	○	○
19.	Older males typically experience a reduced need to ejaculate and hence may maintain an erection of the penis for a longer time than younger males.	○	○	○
20.	Older males and females cannot act as sex partners as both need younger partners for stimulation.	○	○	○
21.	The most common determinant of the frequency of sexual activity in older couples is the interest or lack of interest of the husband in a sexual relationship with his wife.	○	○	○
22.	Barbiturates, tranquilizers, and alcohol may lower the sexual arousal levels of aged persons and interfere with sexual responsiveness.	○	○	○
23.	Sexual disinterest in aged persons may be a reflection of a psychological state of depression.	○	○	○
24.	There is a decrease in frequency of sexual activity with older age in males.	○	○	○
25.	There is a greater decrease in male sexuality with age than there is in female sexuality.	○	○	○
26.	Heavy consumption of cigarettes may diminish sexual desire.	○	○	○
27.	An important factor in the maintenance of sexual responsiveness in the aging male is the consistency of sexual activity throughout his life.	○	○	○
28.	Fear of the inability to perform sexually may bring about an inability to perform sexually in older males.	○	○	○
29.	The ending of sexual activity in old age is most likely and primarily due to social and psychological causes rather than biological and physical causes.	○	○	○
30.	Excessive masturbation may bring about an early onset of mental confusion and dementia in the aged.	○	○	○
31.	There is an inevitable loss of sexual satisfaction in post-menopausal women.	○	○	○
32.	Secondary impotence (or non-physiologically caused) increases in males over the age of 60 relative to young males.	○	○	○
33.	Impotence in aged males may literally be effectively treated and cured in many instances.	○	○	○
34.	In the absence of severe physical disability, males and females may maintain sexual interest and activity well into their 80s and 90s.	○	○	○
35.	Masturbation in older males and females has beneficial effects on the maintenance of sexual responsiveness.	○	○	○

Please indicate the extent to which you agree with the following statements.

		1 Disagree	2	3	4	5	6	7 Agree
36.	Aged people have little interest in sexuality. (Aged = 65+ years of age.)	○	○	○	○	○	○	○
37.	An aged person who shows sexual interest brings disgrace to himself/herself.	○	○	○	○	○	○	○
38.	Institutions, such as nursing homes, ought not to encourage or support sexual activity of any sort in its residents.	○	○	○	○	○	○	○
39.	Male and female residents of nursing homes ought to live on separate floors or separate wings of the nursing home.	○	○	○	○	○	○	○
40.	Nursing homes have no obligation to provide adequate privacy for residents who desire to be alone, either by themselves or as a couple.	○	○	○	○	○	○	○
41.	As one becomes older (say past 65) interest in sexuality inevitably disappears.	○	○	○	○	○	○	○

If a relative of mine, living in a nursing home, was to have a sexual relationship with another resident I would:

		1 Disagree	2	3	4	5	6	7 Agree
42.	Complain to the management.	○	○	○	○	○	○	○
43.	Move my relative from this institution.	○	○	○	○	○	○	○
44.	Stay out of it as it is not my concern.	○	○	○	○	○	○	○
45.	If I knew that a particular nursing home permitted and supported sexual activity in residents who desired such, I would not place a relative in that nursing home.	○	○	○	○	○	○	○

46. It is immoral for older persons to engage in recreational sex.	○	○	○	○	○	○	○
47. I would like to know more about the changes in sexual functioning in older years.	○	○	○	○	○	○	○
48. I feel I know all I need to know about sexuality in the aged.	○	○	○	○	○	○	○
49. I would complain to the management if I knew of sexual activity between any residents of a nursing home.	○	○	○	○	○	○	○
50. I would support sex education courses for aged residents of nursing homes.	○	○	○	○	○	○	○
51. I would support sex education courses for the staff of nursing homes.	○	○	○	○	○	○	○
52. Masturbation is an acceptable sexual activity for older males.	○	○	○	○	○	○	○
53. Masturbation is an acceptable sexual activity for older females.	○	○	○	○	○	○	○
54. Institutions, such as the nursing home, ought to provide large enough beds for couples who desire such to sleep together.	○	○	○	○	○	○	○
55. Staff of nursing homes ought to be trained or educated with regard to sexuality in the aged and/or disabled.	○	○	○	○	○	○	○
56. Residents of nursing homes ought not to engage in sexual activity of any sort.	○	○	○	○	○	○	○
57. Institutions, such as nursing homes, should provide opportunities for the social interaction of men and women.	○	○	○	○	○	○	○
58. Masturbation is harmful and ought to be avoided.	○	○	○	○	○	○	○
59. Institutions, such as nursing homes, should provide privacy such as to allow residents to engage in sexual behavior without fear of intrusion of observation.	○	○	○	○	○	○	○
60. If family members object to a widowed relative engaging in sexual relations with another resident of a nursing home, it is the obligation of the management and staff to make certain that such sexual activity is prevented.	○	○	○	○	○	○	○
61. Sexual relations outside the context of marriage are always wrong.	○	○	○	○	○	○	○

Attitudes Toward Masturbation Scale

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Charlene L. Muehlenhard,[20] *University of Kansas*

The Attitudes Toward Masturbation Scale (ATMS) was developed to assess individuals' complex and often conflicting thoughts and feelings about masturbating (Young & Muehlenhard, 2009). We found two existing scales for measuring attitudes about masturbation: Abramson and Mosher's (1975) Negative Attitudes Toward Masturbation Inventory and Miller and Lief's (1976) Masturbation Attitude Scale. Both were more than 30 years old, both yield only one global score, and both assess respondents' attitudes about masturbation in general rather than about *their own* masturbation. We developed the ATMS to assess respondents' (a) reasons for wanting (or being tempted) to masturbate, (b) reasons for avoiding (or trying to avoid) masturbating, and (c) positive and negative feelings about masturbating.

Development

The ATMS was developed using a multistep process. First, in a pilot study, 236 undergraduate women and men wrote

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answers to open-ended questions about their attitudes and feelings about masturbation. Second, we compiled their responses and used them to create scale items. We also created scale items reflecting themes identified in prior studies of attitudes toward masturbation (e.g., Clifford, 1978; Elliott & Brantley, 1997). Our preliminary scale included 223 items divided into three sections reflecting reasons for wanting—or being tempted—to masturbate, reasons for avoiding—or trying to avoid—masturbation, and feelings about masturbating. Third, a new sample of 518 undergraduate women and men rated these items on a 7-point scale. We used their responses to divide the items into subscales, based on factor loadings derived from principal components analysis, Cronbach's alphas, and conceptual considerations (Young & Muehlenhard, 2009).

The scale was developed and tested using samples of college students, but it could be used with other populations. It is designed so that anyone can complete it, regardless of whether or not they masturbate.

Response Mode and Timing

The ATMS consists of 179 items, divided into 28 subscales in three categories. First, the 13 *Reasons-for-Wanting-to-Masturbate* subscales assess themes such as pleasure, mood improvement, and avoidance of partner sex. Items are rated on a 7-point scale, from 0 (*Not a Reason*) to 6 (*A Very Important Reason*). Second, the 10 *Reasons-for-Avoiding-Masturbation* subscales assess themes such as perceived immorality, lack of desire or interest, and preference for partner sex. The same 7-point scale for response choices is used. Third, the five *Feelings-about-Masturbation* subscales assess satisfaction, guilt, anger, anxiety, and indifference. Respondents rate the strength of each feeling, using a 7-point scale ranging from 0 (*Not at all*) to 6 (*Very strongly*). The ATMS can be administered as a paper-and-pencil questionnaire or online. It can be completed in about 15 to 30 minutes.

Scoring

Subscale scores are calculated by averaging the respondent's ratings for the items on each subscale. Subscale scores can range from 0 to 6. For the *Reasons-for-Wanting-to-Masturbate* subscales and the *Reasons-for-Avoiding-Masturbation* subscales, higher scores reflect a greater importance of the reason tapped by that subscale. For the *Feelings-about-Masturbation* subscales, higher scores reflect greater intensity of feeling.

Each subscale score can be used individually to assess the specific content of each subscale. In addition, four composite scores can be calculated: the *Wanting Composite* (the mean of the 13 *Reasons-for-Wanting-to-Masturbate* subscales), the *Avoiding Composite* (the mean of the 10 *Reasons-for-Avoiding-Masturbation* subscales), the *Positive-Feelings Composite* (the *Satisfaction* subscale score), and the *Negative-Feelings Composite* (the mean of the *Guilt, Anger, Anxiety*, and *Indifference* subscales). These composites can be used to assess the respondent's overall positive and negative attitudes toward masturbation.

The subscales and items on each are as follows:

Reasons-for-Wanting-to-Masturbate Subscales

Pleasure: 1, 2, 35, 41, 42, 44, 50, 51, 52

Self-Exploration and Improvement: 11, 13, 17, 23, 39, 54, 55, 56, 63, 68

Mood Improvement: 47, 60, 62, 67

Relaxation and Stress Relief: 6, 7, 16, 40, 46, 58

Avoidance of Partner Sex: 26, 28, 29, 30, 34, 65

Arousal Decrease: 18, 21, 33, 49, 59, 61, 64, 69

Compulsion: 8, 25, 27, 32, 43

Pleasure of Partner: 15, 66, 70

Adherence to Social Norms: 12, 14, 19, 20, 38, 57

Substitution for Partner Sex: 4, 9, 10, 22, 24, 31

Importance of Fantasy: 36, 37, 48, 72

Feeling Unattractive: 45, 53, 71

Boredom: 3, 5

Reasons-for-Avoiding-Masturbation Subscales

Immorality: 73, 74, 75, 79, 81, 83, 105, 122, 123, 124, 125, 126, 127, 131, 132, 134

No Desire or Interest: 76, 77, 86, 87, 88, 100, 101, 114, 118, 119, 120

Preference for Partner Sex: 90, 103, 104, 107, 110, 128, 129, 133

Fear of Negative Social Evaluation: 84, 91, 93, 95, 102, 121

Sex Negativity: 78, 82, 85, 94, 96, 97

Negative Mood State: 92, 106, 109, 117

Detraction from Partner Sex: 111, 112

In Committed Relationship: 80, 98, 108, 115

Bothered by Thoughts: 116, 130

Self-Control: 89, 99, 113

Feelings-Related-to-Masturbation Subscales

Satisfaction: 135, 139, 146, 147, 149, 150, 151, 152, 156, 157, 158, 163, 166, 170, 173, 174, 176, 177, 178

Guilt: 136, 138, 142, 143, 153, 154, 155, 167, 168, 169, 171, 179

Anger: 159, 160, 161, 165

Anxiety: 144, 145, 148, 162

Indifference: 137, 140, 141, 164, 172, 175

Reliability

For a sample of 518 undergraduate women and men (Young & Muehlenhard, 2009), Cronbach's alphas for the subscales ranged from .71 to .97, providing evidence that the subscales have good internal consistency. Hungrige (2016) used the *Negative-Feelings Composite* to study women's attitudes toward masturbation; for her online sample of 243 women, ages 18 to 70, this composite demonstrated high reliability ($\alpha = .97$).

Validity

Young and Muehlenhard (2009) found numerous significant differences between participants who masturbated and those who did not, even after controlling for gender. Compared with non-masturbators, masturbators scored significantly higher on 9 of the 13 *Reasons-for-Wanting-to-Masturbate* subscales and the *Satisfaction* subscale and significantly lower on 5 of the 10 *Reasons-for-Avoiding-Masturbation* subscales and the *Guilt, Anger, Anxiety*, and *Indifference* subscales.

Consistent with meta-analytic findings that more men than women masturbate (Oliver & Hyde, 1993; Petersen & Hyde, 2007), there were significant gender differences on 18 of the 28 subscales. Men generally reported stronger reasons for wanting to masturbate, weaker reasons for avoiding masturbation, and stronger positive and weaker negative feelings related to masturbation. When controlling for masturbation status, there were fewer gender differences, but some remained: For the *Reasons-for-Wanting-to-Masturbate* subscales, women scored higher on *Self-Exploration and Improvement, Avoidance of Partner Sex*, and *Pleasure of Partner*; men scored higher on *Boredom*. For *Reasons-for-Avoiding-Masturbation* subscales, women scored higher on *No Desire or Interest, Fear of Negative Social Evaluation*, and *Sex Negativity*. For *Feelings-Related-to-Masturbation* subscales, women scored higher on *Anxiety*.

Young and Muehlenhard (2009) performed a cluster analysis on participants' subscale scores. They identified four clusters: The *enthusiastic* cluster had high *Wanting* subscale scores and low *Avoiding* subscales scores. The *lukewarm* cluster had low *Wanting* subscale scores and even lower *Avoiding* subscales scores. The *high-guilt* cluster had low *Wanting* subscale scores and high *Avoiding* subscales scores. The *ambivalent* cluster had the highest *Wanting* subscale scores and the highest *Avoiding* subscales scores. These clusters showed numerous differences in the percentages of women and men in the cluster, the percentages who reported masturbating, and their qualitative comments about masturbation.

In a study of women aged 18–70, mentioned above, Hungrige (2016) found that women who had not masturbated as adults scored significantly higher on the *Negative-Feelings Composite* than those who had masturbated as adults. Similarly, Stroupe (2008) found that undergraduate women who never masturbated had significantly higher *Negative-Feelings* and *Reasons-for-Avoiding-Masturbation Composite* scores and significantly lower *Positive-Feelings* and *Reasons-for-Wanting-to-Masturbate Composite* scores than did women who masturbated regularly; women who masturbated infrequently were intermediate. Furthermore, many individual subscales were significantly related to masturbation frequency and to whether women were orgasmic from masturbation and from partnered sex.

Other Information

With our permission, Ramanathan et al. (2014) created a short version of the ATMS. To assess reasons for masturbating, they used 13 items, one for each ATMS reasons-for-masturbating subscale. To assess feelings about masturbation, they used 2–3 items from each ATMS feelings subscale. They used a dichotomous response scale, allowing them to calculate the percentages of participants who reported each reason and feeling about masturbation.

With appropriate citation, the ATMS may be copied and used for educational, research, and clinical purposes, without permission. The authors would appreciate receiving a summary of any research using this scale.

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Exhibit

Attitudes Toward Masturbation Scale

Reasons for Wanting to Masturbate

Whether they masturbate or not, people may *want* to masturbate (or be *tempted* to masturbate) for many different reasons. Below is a list of possible reasons. Please rate how strong each of the reasons is for your *wanting* to masturbate or being tempted to masturbate, *regardless of whether or not you actually masturbate*.

For you, how strong are the following reasons for *wanting* to (or being *tempted* to) masturbate?

	0 Not a Reason	1	2	3 A Moderately Important Reason	4	5	6 A Very Important Reason
1. If I'm feeling horny.	○	○	○	○	○	○	○
2. I find it pleasurable.	○	○	○	○	○	○	○
3. If there is nothing else to do.	○	○	○	○	○	○	○
4. If I'm not getting as much sex as I want.	○	○	○	○	○	○	○
5. If I'm bored.	○	○	○	○	○	○	○
6. To relieve stress.	○	○	○	○	○	○	○
7. If I'm anxious.	○	○	○	○	○	○	○
8. Because—even though I try—I just can't stop myself.	○	○	○	○	○	○	○
9. Because it's a substitute for sex with a partner.	○	○	○	○	○	○	○
10. Out of sexual frustration.	○	○	○	○	○	○	○
11. I hope that masturbating will help me reach orgasm with a partner.	○	○	○	○	○	○	○
12. Someone else thinks I should (e.g., a friend or a dating partner).	○	○	○	○	○	○	○
13. To explore my own sexuality.	○	○	○	○	○	○	○
14. So I could say that I've done it (it's something to talk about).	○	○	○	○	○	○	○
15. My partner wants to watch me do it.	○	○	○	○	○	○	○
16. It's a good way to take a break (e.g., a break from studying, etc.).	○	○	○	○	○	○	○
17. I'm curious about it.	○	○	○	○	○	○	○
18. If I want to avoid unwanted arousal later.	○	○	○	○	○	○	○
19. My friends have masturbated, and I want to be able to talk with them about it.	○	○	○	○	○	○	○
20. "Everyone" does it, and I want to feel "sexually normal."	○	○	○	○	○	○	○
21. If I'm so sexually aroused that it's interfering with other things I want or need to do.	○	○	○	○	○	○	○
22. If I don't have a partner to have sex with.	○	○	○	○	○	○	○
23. To make myself a better sexual partner (e.g., to figure out how to achieve orgasm or to become more comfortable having orgasms with my partner).	○	○	○	○	○	○	○
24. Masturbating helps me keep my mind off sex with a partner.	○	○	○	○	○	○	○
25. It's a compulsive sexual behavior.	○	○	○	○	○	○	○
26. Masturbating helps me remain a virgin.	○	○	○	○	○	○	○
27. I just do it without really thinking about it.	○	○	○	○	○	○	○

28. Masturbating makes it easier to avoid sex with a partner, and I don't want to have sex with a partner for moral reasons (e.g., I don't want to have sex before marriage).	○	○	○	○	○	○	○
29. Masturbating makes it easier to avoid sex with a partner, and I don't want to have sex with a partner for health reasons (e.g., I don't want to risk sexually transmitted diseases or pregnancy).	○	○	○	○	○	○	○
30. Masturbating makes it easier to avoid sex with a partner, and I don't want to have sex with a partner for self-esteem reasons (e.g., I don't feel comfortable being sexual with someone else).	○	○	○	○	○	○	○
31. If I have a partner, but my partner refuses to have sex.	○	○	○	○	○	○	○
32. I feel an uncontrollable urge to do it.	○	○	○	○	○	○	○
33. If I want to decrease my sexual arousal so I can focus on something else.	○	○	○	○	○	○	○
34. It's more moral to masturbate than to have sex with a partner.	○	○	○	○	○	○	○
35. If I want to have an orgasm.	○	○	○	○	○	○	○
36. I get aroused by sexual activities that are not socially acceptable, so I fantasize about them during masturbation.	○	○	○	○	○	○	○
37. I get aroused by sexual activities that are not possible in real life, so I fantasize about them during masturbation (e.g., sex with a movie star, sex on a beach, etc.).	○	○	○	○	○	○	○
38. Because I hear about it from TV, movies, magazines, etc.	○	○	○	○	○	○	○
39. Masturbating improves my sexual health.	○	○	○	○	○	○	○
40. To help me fall asleep.	○	○	○	○	○	○	○
41. Because it's fun.	○	○	○	○	○	○	○
42. Because I know exactly how to stimulate myself and maximize my pleasure.	○	○	○	○	○	○	○
43. It's a habit.	○	○	○	○	○	○	○
44. If I am already sexually aroused (e.g., from watching a movie, reading a magazine).	○	○	○	○	○	○	○
45. Because I feel like no one is attracted to me.	○	○	○	○	○	○	○
46. If I want to relax.	○	○	○	○	○	○	○
47. If I'm angry.	○	○	○	○	○	○	○
48. If I want to exercise my imagination.	○	○	○	○	○	○	○
49. So that I can focus my concentration on a task after masturbating.	○	○	○	○	○	○	○
50. Because I deserve to experience pleasure.	○	○	○	○	○	○	○
51. If I see someone or something that is arousing.	○	○	○	○	○	○	○
52. If I have an urge to do something sexual.	○	○	○	○	○	○	○
53. Because I'm not comfortable enough with my body to be sexual with someone else.	○	○	○	○	○	○	○
54. To learn how to give myself pleasure.	○	○	○	○	○	○	○
55. To gain more sexual confidence.	○	○	○	○	○	○	○

56. Because it's good exercise.	○	○	○	○	○	○	○
57. Because my friends masturbate.	○	○	○	○	○	○	○
58. To calm myself down.	○	○	○	○	○	○	○
59. So that I can stop thinking about masturbating.	○	○	○	○	○	○	○
60. If I feel frustrated about something else.	○	○	○	○	○	○	○
61. It makes me feel peaceful.	○	○	○	○	○	○	○
62. It distracts me when I'm feeling down.	○	○	○	○	○	○	○
63. To try a new method (e.g., sex toys, pornography).	○	○	○	○	○	○	○
64. It's an escape.	○	○	○	○	○	○	○
65. To avoid using another person for sex.	○	○	○	○	○	○	○
66. Because it arouses my partner when he/she knows that I masturbated.	○	○	○	○	○	○	○
67. If I'm in a bad mood.	○	○	○	○	○	○	○
68. To learn how to have better orgasms.	○	○	○	○	○	○	○
69. If I'm already sexually aroused, and I want to decrease my level of sexual arousal.	○	○	○	○	○	○	○
70. Because it arouses my partner when I masturbate in front of him/her.	○	○	○	○	○	○	○
71. If I'm feeling unattractive.	○	○	○	○	○	○	○
72. I enjoy my fantasies during masturbation.	○	○	○	○	○	○	○

Reasons for *Avoiding* (or Trying to Avoid) Masturbating

Whether they masturbate or not, people might *avoid* (or try to avoid) masturbating for many different reasons. Below is a list of possible reasons. Please rate how strong each of the reasons is for you *avoiding* (or trying to avoid) masturbating, *regardless of whether or not you actually masturbate*.

For you, how strong are the following reasons for *avoiding* (or trying to avoid) masturbating?

	0 Not a Reason	1	2	3 A Moderately Important Reason	4	5	6 A Very Important Reason
73. It's against my religion.	○	○	○	○	○	○	○
74. It's against my morals or values.	○	○	○	○	○	○	○
75. It's against my parents' morals or values.	○	○	○	○	○	○	○
76. I'm just not interested.	○	○	○	○	○	○	○
77. It just doesn't appeal to me.	○	○	○	○	○	○	○
78. I am uncomfortable with any sexual behavior.	○	○	○	○	○	○	○
79. It would make me feel cheap.	○	○	○	○	○	○	○
80. If I am committed to someone.	○	○	○	○	○	○	○
81. I would feel guilty about it.	○	○	○	○	○	○	○
82. I am anxious about sexual behavior.	○	○	○	○	○	○	○
83. I know I'd regret it.	○	○	○	○	○	○	○
84. I fear it will damage my reputation.	○	○	○	○	○	○	○
85. I feel uncomfortable or embarrassed about my body.	○	○	○	○	○	○	○
86. I think it would be physically uncomfortable.	○	○	○	○	○	○	○
87. It seems weird to me.	○	○	○	○	○	○	○
88. I feel strange doing it.	○	○	○	○	○	○	○
89. I think I should have more self-control.	○	○	○	○	○	○	○
90. If I'm currently sexually satisfied.	○	○	○	○	○	○	○
91. Society says it's wrong.	○	○	○	○	○	○	○
92. If I'm stressed.	○	○	○	○	○	○	○

93. I'm afraid of someone knowing I masturbate	○	○	○	○	○	○	○
94. It makes me feel lonely.	○	○	○	○	○	○	○
95. If I'm afraid of being caught.	○	○	○	○	○	○	○
96. It makes me feel sexually inadequate.	○	○	○	○	○	○	○
97. It's bad for my health.	○	○	○	○	○	○	○
98. If I'm in a committed relationship.	○	○	○	○	○	○	○
99. I like to feel in control of my urges.	○	○	○	○	○	○	○
100. I'm not sure how to masturbate.	○	○	○	○	○	○	○
101. I don't like how it feels.	○	○	○	○	○	○	○
102. It's embarrassing to me.	○	○	○	○	○	○	○
103. Because I like intercourse better.	○	○	○	○	○	○	○
104. Because I like any sexual contact with a partner better.	○	○	○	○	○	○	○
105. I feel bad about myself afterwards.	○	○	○	○	○	○	○
106. If I'm depressed.	○	○	○	○	○	○	○
107. Orgasms are better with a partner.	○	○	○	○	○	○	○
108. My partner doesn't want me to do it.	○	○	○	○	○	○	○
109. If I'm worried about something else.	○	○	○	○	○	○	○
110. If I've recently had sex.	○	○	○	○	○	○	○
111. It makes me less able to orgasm during sex.	○	○	○	○	○	○	○
112. It makes me less horny during sex.	○	○	○	○	○	○	○
113. I want to improve my self-discipline.	○	○	○	○	○	○	○
114. It's boring.	○	○	○	○	○	○	○
115. I feel like I'm cheating on my partner.	○	○	○	○	○	○	○
116. My fantasies during masturbation bother me.	○	○	○	○	○	○	○
117. If I've had a bad day.	○	○	○	○	○	○	○
118. It's a waste of time.	○	○	○	○	○	○	○
119. It seems pointless.	○	○	○	○	○	○	○
120. I don't find it sexually arousing.	○	○	○	○	○	○	○
121. Other people might find me gross.	○	○	○	○	○	○	○
122. My family is against it.	○	○	○	○	○	○	○
123. My friends are against it.	○	○	○	○	○	○	○
124. It makes me feel empty inside.	○	○	○	○	○	○	○
125. I was raised to believe it's wrong.	○	○	○	○	○	○	○
126. It makes me feel ashamed.	○	○	○	○	○	○	○
127. It's disrespectful to myself.	○	○	○	○	○	○	○
128. If I'm satisfied with the quantity of the sex I'm having.	○	○	○	○	○	○	○
129. If I'm satisfied with the quality of the sex I'm having.	○	○	○	○	○	○	○
130. My sexual thoughts during masturbation bother me.	○	○	○	○	○	○	○
131. Masturbation in an adult is immature.	○	○	○	○	○	○	○
132. It makes me feel like I'm sinning against myself.	○	○	○	○	○	○	○
133. It's not as good as sex.	○	○	○	○	○	○	○
134. It does not fit with my religious views.	○	○	○	○	○	○	○

Feelings about Masturbation

Check which set of directions applies to you:

○ **If you masturbate**: People feel many different things when they masturbate. Below is a list of possible feelings. *How strongly, if at all, do you usually experience these feelings when you masturbate?*

○ **If you don't masturbate**: People feel many different things when they masturbate. Below is a list of possible feelings. *How strongly, if at all, do you think you **would** usually experience these feelings if you **did** masturbate?*

How strongly do you experience this feeling when you masturbate?

or

How strongly would you experience this feeling if you did masturbate?

	0	1	2	3	4	5	6
	Not At All			Somewhat			Very Strongly
135. Happy	○	○	○	○	○	○	○
136. Guilty	○	○	○	○	○	○	○
137. Empty	○	○	○	○	○	○	○
138. Pathetic	○	○	○	○	○	○	○
139. Healthy	○	○	○	○	○	○	○
140. Indifferent	○	○	○	○	○	○	○
141. Nothing	○	○	○	○	○	○	○
142. Strange	○	○	○	○	○	○	○
143. Embarrassed	○	○	○	○	○	○	○
144. Anxious	○	○	○	○	○	○	○
145. Tense	○	○	○	○	○	○	○
146. Horny	○	○	○	○	○	○	○
147. Focused	○	○	○	○	○	○	○
148. Awkward	○	○	○	○	○	○	○
149. Good	○	○	○	○	○	○	○
150. Calm	○	○	○	○	○	○	○
151. Relieved	○	○	○	○	○	○	○
152. In control	○	○	○	○	○	○	○
153. Ashamed	○	○	○	○	○	○	○
154. Regretful	○	○	○	○	○	○	○
155. Degraded	○	○	○	○	○	○	○
156. Pleased	○	○	○	○	○	○	○
157. Connected to myself	○	○	○	○	○	○	○
158. Refreshed	○	○	○	○	○	○	○
159. Frustrated	○	○	○	○	○	○	○
160. Aggressive	○	○	○	○	○	○	○
161. Angry	○	○	○	○	○	○	○
162. Nervous	○	○	○	○	○	○	○
163. Content	○	○	○	○	○	○	○
164. Unemotional	○	○	○	○	○	○	○
165. Stressed	○	○	○	○	○	○	○
166. Attractive	○	○	○	○	○	○	○
167. Immoral	○	○	○	○	○	○	○
168. Remorseful	○	○	○	○	○	○	○
169. Disgusted	○	○	○	○	○	○	○
170. Thrilled	○	○	○	○	○	○	○
171. Disappointed	○	○	○	○	○	○	○
172. Detached	○	○	○	○	○	○	○
173. Aroused	○	○	○	○	○	○	○
174. Relaxed	○	○	○	○	○	○	○
175. Passive	○	○	○	○	○	○	○
176. Comfortable	○	○	○	○	○	○	○
177. Satisfied	○	○	○	○	○	○	○
178. Invigorated	○	○	○	○	○	○	○
179. Sinful	○	○	○	○	○	○	○

6 Body Image and Sexualization

Trans-Specific Sexual Body Image Worries Scale

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Sexual body image worry is an important sexual health concern affecting people from all gender spectrums; however, available measures of this construct assume the existence of certain body parts, which is often problematic for transgender (trans) people (Bauer & Hammond, 2015). Moreover, trans persons may have specific concerns, such as not being perceived as their identified gender, being fetishized by sexual partners, or discomfort with sexed anatomy (Kosenko, 2011; Bauer & Hammond, 2015). Therefore, the Trans PULSE Project research team created a brief 5-item Trans-Specific Sexual Body Image Worries (T-Worries) scale to be utilized with trans participants in survey research. The T-Worries scale is a unique measure of sexual body image worries specifically tailored to the trans population, which is not available elsewhere. This construct may be associated with sexual behaviors and health in the trans population, as sexual body image is known to be related to sexual avoidance, lower self-assertiveness during sex, and lower condom negotiation self-efficacy among cisgender persons.

Development

The measure was developed by community and academic members of the Trans PULSE Project's Investigators Committee and Community Engagement Team to capture sexual body image issues among members of trans communities. The development process drew on published literature on cisgender and transgender populations, qualitative data from initial focus groups, and lived experience, as well as pre-testing with some members of the Community Engagement Team. More information on Trans PULSE can be found in previous publications (e.g., Bauer, Travers, Scanlon, & Coleman, 2012). The initial measure included 7 items, 4 of which were not unique to trans people but were deemed essential for their experiences (e.g., body shame).

TABLE 1
Results from Exploratory Factor Analysis of T-Worries, Final 5-Item Scale

	Factor loadings[a]	
	General Body Image Worries	**Trans-Related Body Image Worries**
1. I worry that other people think my body is unattractive	**0.89**	0.03
2. I worry that there are very few people who would want to have sex with me	**0.84**	–0.07
3. I worry about feeling ashamed about my body	**0.71**	0.22
4. I worry that once I'm naked, people will not see me as the gender I am	0.16	**0.70**
5. I worry that I can't have the sex I want until I have a(nother) surgery	–0.06	**0.69**
Mean in each subscale	2.16	2.04
Overall mean	2.11	
Overall Cronbach's α	.82	

[a] $N = 323$

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The 7-item measure was first administered in the Trans PULSE survey, a respondent driven sample of 433 Ontario, Canada residents age sixteen and older; 367 participants indicated they had ever had partnered sex, and 323 of these responded to all relevant questions for the current analysis. Exploratory Factor Analysis (EFA) results suggested that two items did not belong in the scale, resulting in a 5-item final scale (α = .82) with two smaller subscales: *general body image worries* and *trans-related body image worries* (Dharma, Scheim, & Bauer, in press).

Response Mode and Timing

T-Worries can be completed online or on paper, as done in Trans PULSE (Bauer et. al., 2012). Respondents are asked to rate their degree of "worry" for each item on a 5-point scale ranging from 0 (*not at all [worried]*) to 4 (*very [worried]*). Timing is unknown since the scale was administered as part of a larger survey, but this short scale can be completed relatively quickly.

Scoring

No reverse scoring is necessary; all 5 items are summed to produce an overall score with a possible range of 0 to 20. There is no established cut-off for dichotomizing high versus low sexual body image worries. Subscale scores can be calculated, although the total score is recommended for analysis based on the small number of items in the subscales.

Reliability

Test-retest reliability has not been assessed. The T-Worries scale appears to be internally consistent (α = .82). Within-subscale reliability cannot be computed due to the small number of items in the "trans-related body image worries" subscale.

Validity

The scale has strong convergent validity; in Trans PULSE, overall T-Worries scores were strongly correlated with measures of self-esteem ($r = -.54$), sexual anxiety ($r = .51$), sexual fear ($r = .46$), and depressive symptoms ($r = .46$; Dharma et al., in press). The overall scores were normally distributed (mean = 2.11, median = 2, skewness = –.04), T-Worries scores were higher among those who were sexually inactive compared to those who had low or high HIV-related sexual risk (Mean Scores: no risk: 2.60, low risk: 1.98, high risk: 2.01; $p < .001$). There were no significant differences in the mean or in the structure of the scale between transmasculine and transfeminine subgroups. No confirmatory study in an independent sample has been conducted, hence the two-subscale structure has not been validated.

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Exhibit

Trans-Specific Sexual Body Image Worries (T-Worries) Scale

When I think about having sex, I worry …

	Not at all	Slightly	Somewhat	Moderately	Very
1. That other people think my body is unattractive.	○	○	○	○	○
2. That there are very few people who would want to have sex with me.	○	○	○	○	○
3. About feeling ashamed about my body.	○	○	○	○	○
4. That once I'm naked, people will not see me as the gender I am.	○	○	○	○	○
5. That I can't have the sex I want until I have a(nother) surgery.	○	○	○	○	○

The Index of Male Genital Image

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The Index of Male Genital Image (IMGI; Davis, Binik, Amsel, & Carrier, 2013) measures the degree of satisfaction that men experience with their genitals. While other measures of male genital image have focused primarily on penile size, the 14 items of the IMGI include further physical characteristics by including subscales that measure satisfaction with the shape of the genitals, circumcision status, pubic hair, ejaculation, and overall appearance, in addition to size. Having a measure of genital image beyond size is important, as male genital image is related to overall body image, psychosocial variables, and sexual health. For example, men with more negative genital image have been found to have higher sexual anxiety and self-consciousness and lower body image, sexual-esteem, competence, and autonomy (Winter, 1989). Therefore, the IMGI represents an important contribution to the literature, by providing a multi-factorial assessment of male genital image.

Development

Potential scale items were generated based on a review of previous measures and additional items suggested by external experts. First, items were adapted from three existing relevant measures: the Male Genital Image Scale (Winter, 1989), the Penile Perception Score (Weber, Schönbucher, Landolt, & Gobet, 2008), and Hypospadias Outcome (Mureau, Slijper, Slob, Verhulst, & Nijman, 1996). Second, a group of experts reviewed items from a list generated by the authors on the basis of a literature review and added additional items for consideration. These experts included two urologists and two psychologists based at teaching hospitals, and one professor of sexology who specializes in male sexual health. Finally, each expert rated all 30 generated items on a scale of 1 (*irrelevant*) to 4 (*extremely relevant*). Ratings of 1 and 2 were considered content invalid, while ratings of 3 and 4 were considered content valid. A content validity index was calculated by generating a ratio of valid to invalid ratings, and any item with a content validity index less than .5 was marked for deletion.

All 31 generated items on the original scale were administered to 686 men recruited from Internet sites targeting male health and sexuality, Peyronie Disease forums, and hypospadias groups (Davis et al., 2013). Fifty participants were removed from the final analytical sample, based on incomplete responses or irregular data entries. The responses of the remaining 636 respondents, consisting of both healthy and clinical populations, were used for data analysis.

Item deletion was determined based on a combination of variables. First, content validity indices were examined. Twelve items had content validity indices lower than .5, indicating that the majority of individuals on the expert panel deemed the item to be content invalid, and were therefore marked for deletion. Second, inter-item correlations were calculated. Inter-item correlations below .30 were indicative of poor fit in the scale and were removed. Inter-item correlations greater than .70 were indicative of potential problems with multicollinearity; in the event that two items displayed strong multicollinearity, the item with the higher item-to-total correlation was retained. Finally, the number of incomplete and neutral responses (i.e., Item 4, *I have no feeling one way or the other*) were examined, and items with over 50 percent missing or neutral responses were deleted. Following these item deletions, 14 items remained, comprising the IMGI.

Based on Joliffe and Morgan's (1992) recommendation of factor criterion eigenvalues of greater than .7, a principal component analysis revealed a six-factor model. This six-factor model accounted for 79.2 percent of the variance. Means and standard deviations of each factor and overall IMGI scores are depicted in Table 1 (Davis et al., 2013).

TABLE 1
IMGI Factor Descriptive Data

Factor	*M*	*SD*	*Mdn*	Possible Range
Overall[a]	71.41	13.58	71.33	14–98
Superficial Appearance[b]	21.50	4.26	22.0	4–28
Penile Size[c]	14.33	4.59	15.0	3–21
Circumcision Status[d]	4.98	2.19	6.0	1–7
Ejaculatory Concerns[e]	9.99	2.64	10.0	2–14
Pubic Hair[f]	4.88	1.48	5.0	1–7
Penile Shape[g]	16.05	3.33	16.0	3–21

[a]$N = 636$. [b]$n = 581$. [c]$n = 623$. [d]$n = 242$. [e]$n = 617$. [f]$n = 633$. [g]$n = 571$.

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Factor 1, *Superficial Appearance*, consisted of four items assessing satisfaction with skin texture, veins, genital colour, and urethral location (Items 4, 6, 7, and 11). Factor 2, *Penile Size*, consisted of three items assessing satisfaction with size of the flaccid penis and length and girth of the erect penis (Items 1, 2, and 3). Factor 3, *Circumcision Status*, consisted of one item assessing satisfaction with circumcision status (Item 9). Factor 4, *Ejaculatory Concerns*, consisted of two items assessing satisfaction with testicular size and amount of semen (Items 10 and 13). Factor 5, *Pubic Hair*, consisted of one item assessing satisfaction with the amount of pubic hair (Item 12). Lastly, Factor 6, *Penile Shape*, consisted of three items assessing satisfaction with penile curvature, glans shape and genital scent (Items 5, 8, and 14).

A multiple regression revealed that penile size was the most important predictor of overall genital satisfaction (ß = .30, $p < .001$), followed by circumcision status (ß = .28, $p < .001$), penile shape (ß = .20, $p < .001$), superficial appearance (ß = .16, $p < .001$), and ejaculatory concerns (ß = .15, $p < .001$).

Response Mode and Timing

The IMGI consists of 14 questions assessing satisfaction with characteristics of genitals related to each of the subscales. Each question is answered on a 7-point Likert-type scale, ranging from *extremely dissatisfied* to *extremely satisfied*. A central item was included, 4 (*I have no feeling one way or the other*), in order to provide an option to indicate that an item has been deemed unimportant. The IMGI is written at an elementary school reading level and should take less than 10 minutes to complete.

Scoring

An overall IMGI score can be calculated by summing each of the item responses. Subscale scores for each factor can be tabulated by summing the relevant items of each scale. No items are reverse coded. The possible ranges of both the overall score and the subscale scores are shown in Table 1. Lower scores on the IMGI are reflective of more dissatisfaction with genital image.

Reliability

In the previously described sample of 636 respondents aged 15 to 73, Cronbach's alpha for the IMGI was found to be .89, indicating good reliability (Davis et al., 2013).

Validity

In order to determine discriminant validity, the overlap between items on the Body Areas Satisfaction Scale (Cash, 2000), a measure of general body image, and the items on the IMGI was assessed by administering the scales to the 636 respondents described in the sample characteristics (Davis et al., 2013). A principal component analysis of these responses resulted in eight factors, which included the original six components of the IMGI and two components containing items from the Body Areas Satisfaction Scale; there was no item overlap. The IMGI therefore appears to measure a construct distinct from general body image.

Construct validity for the IMGI was assessed by conducting independent *t*-tests on both psychosexual variables and health conditions, as men with psychosexual difficulties and health conditions would be expected to have lower genital image (Davis et al., 2013). The sample was therefore administered *yes*/*no* questions assessing for circumcision status, sexually transmitted infection status, any difficulties with attaining or maintaining an erection, and whether they ejaculated earlier than they wanted to or within less than one minute of sexual activity commencement. In addition, they were asked whether they had Peyronie's disease or hypospadias as men with these conditions would be expected to have lower scores on penile shape and superficial appearance. With respect to psychosexual variables, as expected, men with lower IMGI scores were found to report erectile difficulty ($t(512) = 3.30$, $p < .001$), premature ejaculation ($t(494) = 3.25$, $p < .001$), being circumcised ($t(526) = 3.21$, $p < .001$), and having sexually transmitted infections ($t(516) = 2.15$, $p < .05$). Two health conditions, Peyronie's disease and Hypospadias, were also included to assess for construct validity. No significant group differences were found between men in these groups and overall IMGI scores; however, as predicted, men with hypospadias had lower scores on urethral location ($t(612) = 3.57$, $p < .01$) and men with Peyronie disease had lower scores on penile curvature ($t(592) = 2.80$, $p < .01$). This suggests that the IMGI displays good construct validity and has the potential to be used in sexual health studies as a mediator of outcome.

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Exhibit

Index of Male Genital Image

Men have varying levels of satisfaction with different aspects of their genitals. Using the following scale, please rate how satisfied you are with each of the various aspects of your genitals.

	1 Extremely dissatisfied	2 Very dissatisfied	3 Somewhat dissatisfied	4 No feeling one way or the other	5 Somewhat satisfied	6 Very satisfied	7 Extremely satisfied
1. Length of erect penis	○	○	○	○	○	○	○
2. Girth of erect penis	○	○	○	○	○	○	○
3. Size of flaccid penis	○	○	○	○	○	○	○
4. Color of genitals	○	○	○	○	○	○	○
5. Shape of glans (head)	○	○	○	○	○	○	○
6. Location of urethra	○	○	○	○	○	○	○
7. Texture of skin	○	○	○	○	○	○	○
8. Curvature of penis	○	○	○	○	○	○	○
9. Circumcision status	○	○	○	○	○	○	○
10. Size of testicles	○	○	○	○	○	○	○
11. Genital veins	○	○	○	○	○	○	○
12. Amount of pubic hair	○	○	○	○	○	○	○
13. Amount of semen	○	○	○	○	○	○	○
14. Scent of genitals	○	○	○	○	○	○	○

Enjoyment of Sexualization Scale

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We developed the Enjoyment of Sexualization Scale (ESS) to operationalize the idea that many women find appearance-based attention rewarding (Liss, Erchull & Ramsey, 2011) despite the notable negative consequences of objectification and self-objectification (American Psychological Association, Task Force on the Sexualization of Girls, 2007). The ESS is an 8-item, single-factor measure that assesses the extent to which women find sexualized male attention enjoyable, rewarding, and empowering.

Development

The ESS was developed with undergraduate women who were mostly heterosexual. The initial items were generated through a brainstorming process that was based on a review of the literature and informal conversations with young women about their feelings of enjoying sexualized attention, particularly from men. We originally generated 12 ESS items. These items were subjected to exploratory factor analysis ($N = 212$). A one-factor solution was most appropriate from examination of the scree plot. This factor had eight items with factor loadings above .4. A second factor had an eigenvalue over 1 but did not have sufficient items loading above .4 to create a coherent factor. This second factor was further developed through later work as the Sex is Power Scale (SIPS; Erchull & Liss, 2013).

A variation of the ESS was developed by other researchers with slightly different wording meant to be utilized for men (Visser, Sultani, Choma, & Pozzebon, 2014).

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Response Mode and Timing

Items are measured on a 6-point scale ranging from 1 (*disagree strongly*) to 6 (*agree strongly*). Six points were used so that participants could not choose a neutral midpoint. Participants should be able to complete the ESS in under 5 minutes.

Scoring

The total ESS score is created by averaging the scores on the 8-items of the ESS. There are no reverse-scored items.

Reliability

Cronbach's alpha of the ESS has been consistently high across samples. In the three studies that were part of the original publication on the ESS (Liss et al., 2011), alphas were .85 and .86 for undergraduate samples and .86 for a third sample that consisted of both undergraduates and community members. The ESS has also been found to be reliable in a sample of lesbian women (α = .83; Erchull & Liss, 2015). The test-retest reliability of the ESS has not yet been assessed, and it is unknown how stable the underlying construct is across time and situations.

Validity

In the second study of the original validation paper (Liss et al., 2011), the ESS was subjected to confirmatory factor analysis ($N = 227$) which confirmed the 8-items on the first factor from the first study in this paper. In this study, the ESS was found to be moderately correlated with other measures relevant to women's sexuality and objectification indicating convergent validity. However, these correlations were moderate, indicating discriminant validity. For example, the ESS was found to be moderately correlated with constructs assessing self-objectification, including the surveillance and shame subscales from the Objectified Body Consciousness Scale (McKinley & Hyde, 1996), as well as the Self-Objectification Questionnaire (Noll & Fredrickson, 1998). It was moderately correlated with the Interpersonal Sexual Objectification Scale (Kozee, Tylka, Augustus-Horvath, & Denchik, 2007), indicating that women who enjoy sexualization also experience objectifying experiences that can be unwanted. It was also moderately correlated with the Sexualized Behavior Scale (Nowatzki & Morry, 2009) and with the appearance subscale of the Contingencies of Self-Worth Scale (Crocker, Luhtanen, Cooper, & Bouvrette, 2003).

In the third study of the original validation paper (Liss et al., 2011), the ESS was explored in a group of both college students and community members (N = 282). The measure was correlated with a variety of conceptually relevant measures, including measures assessing traditional and conservative gender attitudes toward women. The ESS had moderate positive correlations with both hostile and benevolent sexism (Glick & Fiske, 1996) and conservative beliefs on the Attitudes Towards Women scale (Spence, Helmreich, & Stapp, 1973). The ESS was also explored in relation to endorsement of norms of femininity (Mahalik et al., 2005). It was positively related to some feminine norms (e.g., the norm of thinness, the norm of the importance of personal appearance, and the norm of the importance of romantic relationships) but negatively related to other norms (e.g., the norm of modesty and the norm of sexual fidelity). The ESS was unrelated to depression and self-esteem, indicating discriminant validity.

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Exhibit

Enjoyment of Sexualization Scale

Please indicate the extent to which you agree with the following statements.

	1 Strongly Disagree	2	3	4	5	6 Strongly Agree
1. I love to feel sexy.	○	○	○	○	○	○
2. I feel empowered when I look beautiful.	○	○	○	○	○	○
3. I feel complimented when men whistle at me.	○	○	○	○	○	○
4. I want men to look at me.	○	○	○	○	○	○
5. When I wear revealing clothing, I feel sexy and in control.	○	○	○	○	○	○
6. It is important to me that men are attracted to me.	○	○	○	○	○	○
7. I feel proud when men compliment the way I look.	○	○	○	○	○	○
8. I like showing off my body.	○	○	○	○	○	○

Male Body Image Self-Consciousness Scale

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The Male Body Image Self-Consciousness Scale (M-BISC; McDonagh, Morrison, & McGuire, 2008) measures body image self-consciousness during sexual intimacy, which is defined as the extent to which one feels self-conscious about one's body and physical features when engaged in physically intimate situations such as sexual intercourse.

Development

Items were generated through a focus group with three male participants (McDonagh et al., 2008). During the focus group, copies of the female body image self-consciousness during physical intimacy scale (Wiederman, 2000) were distributed to participants. The scale developed for women was discussed, and participants assessed every item with regards to its relevance to men. Participants recommended the exclusion of some of the items and suggested the development of additional items. Conversations were recorded and transcribed verbatim and the text was analyzed, resulting in the development of 39 items. All items were written such that men, with and without sexual experience involving a partner (male or female), could respond.

The dimensionality was assessed with a sample of 136 men residing within the Republic of Ireland who ranged in age from 17 to 34 years ($M = 21.38$, $SD = 3.85$). Approximately 90 percent ($n = 123$) of respondents self-identified as "exclusively heterosexual" or as "more heterosexual than homosexual." In terms of sexual experience, 13.2 percent ($n = 18$) had never engaged in vaginal intercourse, 75.7 percent ($n = 103$) had not experienced anal intercourse, 11 percent ($n = 16$) had never received oral sex, and 19.9 percent ($n = 27$) had never performed oral sex. The median age when participants reported first having consensual sexual intercourse was 17 years, and the median number of sexual partners was 2. The body mass index of participants ranged from 17.35 to 39.45 ($M = 23.86$, $SD = 3.92$).

To reduce the number of scale items, inter-item correlations and corrected item-total were inspected. Five items had correlation coefficients less than .30 and, consequently, were deleted. Corrected item-total correlations were recalculated for the remaining 34 items and all coefficients exceeded .30. Next, inter-item correlations were reviewed; two items correlated with each other in excess of .70 and, thus, the one with the least variance was removed. Sixteen additional items were deleted due to weak inter-item correlations (i.e., rs across other M-BISC items were < .30). Therefore, as a result of these two types of item analysis, twenty-two items were removed from the M-BISC.

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To gauge the dimensionality of the 17 remaining items, an exploratory factor analysis was conducted, with unweighted least squares serving as the extraction method. Decisions regarding the number of factors to retain were based on a parallel analysis in conjunction with the scree plot. Diagnostic tests revealed that the data were suitable for factor analysis (i.e., Bartlett's test of sphericity was statistically significant and the Kaiser-Meyer-Olkin was .90). Based on the output from the parallel analysis and the scree plot, a one factor solution appeared to provide an acceptable representation of the data (eigenvalue = 7.61, accounting for 44% of the variance). Eleven items on the final scale overlap with items from the body image self-consciousness during physical intimacy scale developed for women (Wiederman, 2000), and six items that address male-specific concerns.

Response Mode and Timing

Respondents indicate their answer by circling the number that best corresponds to their agreement or disagreement with each statement. Responses are coded on a 5-point Likert-type scale: 1 (*Strongly Disagree)*, 2 (*Disagree*), 3 (*Don't Know*), 4 (*Agree*), and 5 (*Strongly Agree*). If desired, the anchors may be reversed for a random subset of items, using a scale from 1 (*Strongly Agree*) to 5 (*Strongly Disagree*), so as to prevent acquiescent and response set behaviors. The scale takes no more than 5 minutes to complete.

Scoring

Items are summed to provide a total scale score (possible range is 17 to 85), with higher scores denoting greater levels of body image self-consciousness during physical intimacy.

Reliability

In the original research (McDonagh et al., 2008), the Cronbach's alpha for the 17-item M-BISC was .92 (95% CI [.90, .94]). In further research, Cronbach's alpha coefficients of .90 (95% CI [.89, .91]; McDonagh, Stewart, Morrison, & Morrison, 2016), .94 (95% CI [.93, .95]; van den Brink et al., 2017) and .95 (Loehle et al., 2017) have been reported, suggesting good scale score reliability.

Validity

Construct validity has been demonstrated across three studies. In the original research (McDonagh et al., 2008), levels of body image self-consciousness were related to levels of body esteem, $r(131) = -.56$, $p < .001$; sexual esteem, $r(130) = -.56$, $p < .001$; sexual anxiety, $r(131) = .40$, $p < .001$; self-rated physical attractiveness, $r(130) = -.50$, $p < .001$; and the drive for muscularity, $r(131) = .26$, $p < .005$. A series of point-biserial and Pearson's correlation coefficients also revealed that higher levels of body image self-consciousness during physical intimacy were associated with being less likely to have: (a) engaged in vaginal intercourse, $r_{pb}(129) = -.24$, $p < .01$; (b) performed oral sex on another person, $r_{pb}(129) = -.28$, $p < .001$; or (c) received oral sex from another person, $r_{pb}(129) = .27$, $p < .01$.

The validity of the M-BSIC was also assessed in two international samples of gay men (McDonagh et al., 2016; Data Set A: $N = 562$, age range 18–73 years, $M = 34.35$, $SD = 11.62$; Data Set B: $N = 562$, age range 18–76 years, $M = 34.41$, $SD = 11.67$). Moderate, statistically significant, positive correlations were observed between body image self-consciousness and body embarrassment, $r(533) = .50$, $p < .001$; $r(537) = .47$, $p < .001$, and overall sexual difficulties, $r(560) = .26$, $p < .001$; $r(560) = .22$, $p < .001$.

Among a sample of 201 Dutch men (age range = 18–44 years, $M = 23.88$, $SD = 4.23$), van den Brink et al. (2017) found that scores on the M-BISC correlated positively with negative attitudes toward one's current muscularity, $r(199) = .37$, $p < .001$; body fat, $r(199) = .36$, $p < .001$; height, $r(199) = .24$, $p < .001$; and genitals, $r(199) = .56$, $p < .001$. As well, those reporting greater self-consciousness during physical intimacy also evidenced greater levels of sexual dissatisfaction.

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Exhibit

Male Body Image Self-Consciousness Scale

Instructions: Please read each item carefully and then indicate the most appropriate response under each statement. The term partner refers to someone with whom you are romantically or sexually intimate.

	1 Strongly disagree	2 Disagree	3 Don't know	4 Agree	5 Strongly agree
1. During sex, I would worry that my partner would think my chest is not muscular enough.	○	○	○	○	○
2. During sexual activity, it would be difficult not to think about how unattractive my body is.	○	○	○	○	○
3. During sex, I would worry that my partner would think my stomach is not muscular enough.	○	○	○	○	○
4. I would feel anxious receiving a full-body massage from a partner.	○	○	○	○	○
5. The first time I have sex with a new partner, I would worry that my partner would get turned off by seeing my body without clothes.	○	○	○	○	○
6. I would feel nervous if a partner were to explore my body before or after having sex.	○	○	○	○	○
7. I would worry about the length of my erect penis during physically intimate situations.	○	○	○	○	○
8. During sex, I would prefer to be on the bottom so that my stomach appears flat.	○	○	○	○	○
9. The worst part of having sex is being nude in front of another person.	○	○	○	○	○
10. I would feel embarrassed about the size of my testicles if a partner were to see them.	○	○	○	○	○
11. I would have difficulty taking a shower or a bath with a partner.	○	○	○	○	○
12. During sexual activity, I would be concerned about how my body looks to a partner.	○	○	○	○	○
13. If a partner were to put a hand on my buttocks I would think, "My partner can feel my fat."	○	○	○	○	○
14. During sexually intimate situations, I would be concerned that my partner thinks I am too fat.	○	○	○	○	○
15. I could only feel comfortable enough to have sex if it were dark so that my partner could not clearly see my body.	○	○	○	○	○
16. If a partner were to see me nude I would be concerned about the overall muscularity of the body.	○	○	○	○	○
17. The idea of having sex without any covers over my body causes me anxiety.	○	○	○	○	○

Male Enjoyment of Sexualization Scale

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We developed the Male Enjoyment of Sexualization Scale (ESS:M; Visser, Sultani, Choma, & Pozzebon, 2014) as a male counterpart to Liss, Erchull, and Ramsey's (2011) Enjoyment of Sexualization Scale (ESS). Liss et al.'s (2011) ESS assesses the extent to which women enjoy sexualized attention from men. Our 8-item scale measures the extent to which men enjoy being the recipient of sexualized admiration from women. This scale allows researchers to conduct investigations of sexualization enjoyment in (heterosexual) male samples.

Development

We were interested in determining whether enjoyment of sexualization was similarly relevant and important to men and women. To do so, we evaluated the eight items of Liss et al.'s (2011) ESS and developed heterosexual male counterparts. Thus, for ESS Item 1, "It is important to me that men are attracted to me" we developed the ESS:M item, "It is important to me that women are attracted to me." In this fashion, we generated equivalent items to the eight female ESS items. We administered the new ESS:M to a sample of

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118 male undergraduates, while administering the ESS to 206 female undergraduates. We then examined the psychometric characteristics of both ESS versions. Confirmatory factor analysis showed that the ESS:M yielded a unitary structure as did the original (female) ESS. Men reported higher levels of Enjoyment of Sexualization than women did, but this difference was driven by Item 6: "I feel complimented when women 'check me out' as I walk past,'" which, upon review, we thought was dissimilar to the female item "I feel complimented when men whistle at me." Thus, we ran further analyses without Item 6, but suggest that researchers wanting equivalent male/female scales could change the ESS (female) item to "I feel complimented when men 'check me out' as I walk past."

Response Mode and Timing

Participants respond to items using a five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Participants should be able to complete the scale in under five minutes.

Scoring

We recommend calculating scores as the arithmetic mean of the eight items, although summing could also be used. Total scores are appropriate since this scale has a unitary factor structure. As indicated above, if comparisons are to be drawn between male and female respondents, we recommend either eliminating Item 6 from the analyses or changing the female ESS Item 6 to "I feel complimented when men 'check me out' as I walk past."

Reliability

The internal consistency reliability (Cronbach's alpha) in the original validation study (Visser et al., 2014) was .85, and in a follow-up study (Stiner, Visser, & Bogaert, 2017) it was 82.

Validity

Confirmatory factor analysis (CFA) in the validation study (Visser et al., 2014) supported a unitary factor structure consistent with that of the original (female) ESS. Follow up testing on item loadings determined that only the loading of Item 4 ("I love to feel sexy") varied across the male and female versions, with the item having less importance for heterosexual men's enjoyment of sexualization. Thus, the ESS-M is appropriate for studies in which gender comparisons of heterosexual men and women are of interest.

The ESS-M showed good convergent validity in that it was, as hypothesized, highly correlated (r = .45) with self-objectification (operationalized as self-surveillance); however, ESS-M was not redundant with self-surveillance, as it looked quite different in relation to the Big Five personality space. Self-objectification was related to high Neuroticism, whereas ESS-M was associated with high Extraversion. We interpreted the lack of association between ESS-M and Neuroticism as indicative of good discriminant validity (see Visser et al., 2014 for a full description of the validation study).

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Exhibit

Male Enjoyment of Sexualization Scale

Please indicate the extent to which you agree with the following statements on scale from 1 (Strongly Disagree) to 5 (Strongly Agree):

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1. It is important to me that women are attracted to me.	○	○	○	○	○
2. I feel proud when women compliment the way I look.	○	○	○	○	○
3. I want women to look at me.	○	○	○	○	○
4. I love to feel sexy.	○	○	○	○	○
5. I like showing off my body.	○	○	○	○	○
6. I feel complimented when women "check me out" as I walk past.	○	○	○	○	○
7. When I wear revealing clothing, I feel sexually attractive and in control.	○	○	○	○	○
8. I feel empowered when I look good.	○	○	○	○	○

7 Clinical Self-Efficacy

Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory

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LGB-affirmative psychotherapy is defined as "therapy that celebrates and advocates the authenticity and integrity of lesbian, gay and bisexual persons and their relationships" (Bieschke, McClanahan, Tozer, Grzegorek, & Park, 2000, p. 328). Theoretical tenets of social cognitive theory (Bandura, 1986) were applied to LGB-affirmative psychotherapist training to better delineate ways to train psychotherapists in LGB-affirmative practices (Bieschke, Eberz, Bard, & Croteau, 1998). Exposure of psychotherapists and trainees to four sources of self-efficacy (performance accomplishments, vicarious learning, verbal reinforcement, and physiological states/reactions) is posited to foster increases in LGB-affirmative counselor self-efficacy. An optimal level of LGB-affirmative counseling self-efficacy may serve as a mechanism for implementing LGB-affirmative counseling behaviors and positive therapeutic outcomes, as well as for promoting psychotherapists' interest in LGB-affirmative psychotherapy.

The Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory (LGB-CSI) measures participants' self-efficacy to perform LGB-affirmative counseling behaviors. LGB-affirmative counseling behaviors include (a) *advocacy skills*: identifying and utilizing community resources that are supportive of LGB clients' concerns; (b) *application of knowledge*: counseling LGB clients through unique issues using knowledge of LGB issues in psychology; (c) *awareness*: maintaining awareness of attitudes toward one's own and others' sexual identity development; (d) *assessment*: assessing relevant issues and problems of LGB clients; and (e) *relationship*: building a working alliance with LGB clients. An optimal level of self-efficacy is one that slightly exceeds one's ability. Successful performance requires both high efficacy beliefs and acquisition of knowledge and skills (Bandura, 1986).

The scale is intended for mental health professionals (e.g., psychologists, social workers, counselors) ranging in professional background and level of experience.

Development

The development and validation of the LGB-CSI included five studies (Dillon & Worthington, 2003). In Study 1, item development procedures and an exploratory factor analysis of an initial item pool were conducted. Item development involved investigating LGB-affirmative counseling competencies. First, literature was reviewed to determine the competencies. Five categories were hypothesized to represent the current conceptualization of LGB-affirmative counseling: (a) application of knowledge of LGB issues and the counseling behaviors reliant on a priori understanding of LGB issues, including: the impacts of race, ethnicity, gender, religion, locale, and other cultural variables on sexual identity development; internalized homophobia/heterosexism and biphobia; anti-LGB violence; causality questions; career issues; interpersonal isolation/marginality; relationship issues; LGB family issues; impact of aging; HIV/AIDS; substance abuse; domestic violence; sexual abuse; sexual identity theory; exploration of sexual identity and management; (b) advocacy skills; (c) awareness of one's own and others' sexual identity development; (d) development of a working relationship with an LGB client; (e) assessment of the relevant issues and problems of an LGB client. Items were generated for each issue after a thorough review of the literature.

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A pool of 101 items was developed on the basis of the preliminary framework. The item pool included counseling behaviors that go beyond simple microskills to reflect the complexity of behaviors needed for effective LGB-affirmative counseling. Three counseling psychologists and two doctoral-level graduate students (one self-identified gay male, one self-identified bisexual male, two self-identified lesbian women, and one self-identified heterosexual woman), each of whom had extensive experience in the practice of LGB-affirmative and/or multicultural counseling and research, assessed the content validity of the 101 items. The experts were asked to examine the items to (a) determine whether they were reflective of the critical issues that were gleaned from the literature, (b) ensure coverage of the content domains, (c) eliminate unnecessary items, (d) revise any confusing items, and (e) provide general feedback that would assist in developing items representative of LGB-affirmative counseling. The experts rated each item on content appropriateness and clarity by using a 5-point scale that ranged from 1 (*Not at all Appropriate or Clear*) to 5 (*Very Appropriate or Clear*). Items receiving a mean rating between 1 and 3 were reworded or deleted. Revisions to the LGB-CSI were made on the basis of feedback from experts. A principal axis factor extraction analysis (EFA) was performed on the remaining items of the LGB-CSI. A five-factor solution using a promax rotation yielded the most interpretable solution.

In Study 2, the factor stability of the initial EFA solution was established via confirmatory factor analyses. Study 3 provided evidence of convergent and discriminant validity of the instrument, as well as internal consistency. In Study 4 we assessed the test–retest reliability of the instrument, and in Study 5 we investigated the sensitivity of the LGB-CSI to change across professionals and counselor trainees (Dillon & Worthington, 2003).

Response Mode and Timing

Participants respond to each item using a 6-point Likert-type scale ranging from 1 (*Not at all Confident*) to 6 (*Extremely Confident*). It typically takes a participant 15 minutes to complete the LGB-CSI.

Scoring

The LGB-CSI consists of 32 items. Each item represents an LGB-affirmative counseling behavior. Higher scores are indicative of higher levels of self-efficacy to counsel gay, lesbian, and/or bisexual clients. LGB-CSI subscale scores are obtained by summing all items within each of the five subscales: *Application of Knowledge* (Items 1 to 13) *Advocacy Skills* (Items 19 to 25), *Awareness* (Items 14 to 18), *Assessment* (Items 26 to 29), and *Relationship* (Items 30 to 32). LGB-CSI total scores are obtained by summing all items across the subscales.

Reliability

The LGB-CSI total scale and subscales have evidenced high internal consistency (Cronbach's $\alpha > .70$) in past studies (Dillon & Worthington, 2003; Dillon, Worthington, Soth-McNett, & Schwartz, 2008). However, test–retest reliability estimates indicated LGB-CSI total and subscale scores as relatively unstable over a 2-week time period.

Validity

Content validity of the LGB-CSI items was determined through expert panel review (Dillon & Worthington, 2003). Construct validity was supported through exploratory and confirmatory factor analyses (Dillon & Worthington, 2003). Convergent validity for total scale and subscales was supported by correlations with measures of general counseling self-efficacy and attitudes toward LGB individuals (Dillon & Worthington, 2003). Discriminant validity was evidenced by an absence of relations between the total scale and subscales and measures of social desirability, self-deceptive positivity, and impression management (Dillon & Worthington, 2003). Construct validity was supported by findings indicating varying levels of self-efficacy commensurate with status in the field (Dillon & Worthington, 2003).

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Exhibit

Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory

Instructions: Below is a list of activities regarding counseling/psychotherapy. Indicate your confidence in your current ability to perform each activity by marking the appropriate answer below each question ranging from *Not at all Confident* to *Extremely Confident*. Please answer each item based on how you feel now, not on your anticipated (or previous) ability. I am interested in your actual judgments, so please be *honest* in your responses.

How confident am I in my ability to . . .?

	1 Not at All Confident	2	3	4	5	6 Extremely Confident
1. Directly apply sexual orientation/identity development theory in my clinical interventions with lesbian, gay, and bisexual (LGB) clients.	○	○	○	○	○	○
2. Directly apply my knowledge of the coming out process with LGB clients.	○	○	○	○	○	○
3. Identify specific mental health issues associated with the coming out process.	○	○	○	○	○	○
4. Understand the socially constructed nature of categories and identities such as lesbian, bisexual, gay, and heterosexual.	○	○	○	○	○	○
5. Explain the impact of gender role socialization on a client's sexual orientation/identity development.	○	○	○	○	○	○
6. Apply existing American Psychological Association guidelines regarding LGB-affirmative counseling practices.	○	○	○	○	○	○
7. Use current research findings about LGB clients' critical issues in the counseling process.	○	○	○	○	○	○
8. Assist LGB clients to develop effective strategies to deal with heterosexism and homophobia.	○	○	○	○	○	○
9. Evaluate counseling theories for appropriateness in working with an LGB client's presenting concerns.	○	○	○	○	○	○
10. Help a client identify sources of internalized homophobia and/or biphobia.	○	○	○	○	○	○
11. Select affirmative counseling techniques and interventions when working with LGB clients.	○	○	○	○	○	○
12. Assist in the development of coping strategies to help same-sex couples who experience different stages in their individual coming out processes.	○	○	○	○	○	○
13. Facilitate an LGB-affirmative counseling/support group.	○	○	○	○	○	○
14. Recognize when my own potential heterosexist biases may suggest the need to refer an LGB client to an LGB-affirmative counselor.	○	○	○	○	○	○
15. Examine my own sexual orientation/identity development process.	○	○	○	○	○	○
16. Identify the specific areas in which I may need continuing education and supervision regarding LGB issues.	○	○	○	○	○	○
17. Identify my own feelings about my own sexual orientation and how it may influence a client.	○	○	○	○	○	○
18. Recognize my real feelings versus idealized feelings in an effort to be more genuine and empathic with LGB clients.	○	○	○	○	○	○
19. Provide a list of LGB-affirmative community resources, support groups, and social networks to a client.	○	○	○	○	○	○
20. Refer an LGB client to affirmative social services in cases of estrangement from their families of origin.	○	○	○	○	○	○
21. Refer LGB clients to LGB-affirmative legal and social supports.	○	○	○	○	○	○

22. Provide a client with city, state, federal, and institutional ordinances and laws concerning civil rights of LGB individuals.	○	○	○	○	○	○
23. Help a same-sex couple access local LGB-affirmative resources and support.	○	○	○	○	○	○
24. Refer an LGB elderly client to LGB-affirmative living accommodations and other social services.	○	○	○	○	○	○
25. Refer an LGB client with religious concerns to an LGB-affirmative clergy member.	○	○	○	○	○	○
26. Integrate clinical data (e.g., mental status exam, intake assessments, presenting concern) of an LGB client.	○	○	○	○	○	○
27. Complete an assessment for a potentially abusive same-sex relationship in an LGB-affirmative manner.	○	○	○	○	○	○
28. Assess for post-traumatic stress felt by LGB victims of hate crimes based on their sexual orientations/identities.	○	○	○	○	○	○
29. Assess the role of alcohol and drugs on LGB clients' social, interpersonal, and intrapersonal functioning.	○	○	○	○	○	○
30. Establish an atmosphere of mutual trust and affirmation when working with LGB clients.	○	○	○	○	○	○
31. Normalize an LGB client's feelings during different points of the coming out process.	○	○	○	○	○	○
32. Establish a safe space for LGB couples to explore parenting.	○	○	○	○	○	○

Sexual Intervention Self-Efficacy Scale

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Clinicians are asked about a wide variety of sexual concerns and problems by their clients including such issues as safer sex practices, desire discrepancies within couples, lack of sexual satisfaction and sexual disorders (Reissing & Di Giulio, 2010). However, it is likely that the sexual questions clients ask represent only a fraction of the concerns they actually experience because many individuals will not discuss sexual issues unless the clinician initiates the conversation and demonstrates an openness and comfort with this topic (Hegarty, Brown & Gunn, 2007; Metz & Seifert, 1990; Rubin, 2004). Thus, it is important for clinicians to experience and demonstrate a willingness to address sexual topics with their clients. Yet, many clinicians do not ask about their clients' sexual concerns and/or address these concerns when raised by their clients (Miller & Byers, 2012; Ng, 2007; Reissing & Di Giulio, 2010; Wiederman & Sansone, 1999).

A major reason for this is that they lack education and training related to sexuality and thus are not confident that they can competently address sexual issues with clients (Miller & Byers, 2008, 2009, 2010, 2012; Ng, 2007). That is, they lack sexual intervention self-efficacy. Self-efficacy leads to affective, motivational, and cognitive processes that allow individuals to be more prepared and willing to take on challenging situations (Bandura, 1997). A number of studies have supported the relationship between higher general counseling self-efficacy and counseling skill performance (Larson et al., 1999; Munson, Stadulis, & Munson, 1986; Munson, Zoerink & Stadulis, 1986). The Sexual Intervention Self-Efficacy Scale assesses clinicians' self-efficacy with respect to addressing their clients' sexual concerns (Miller & Byers, 2008). The scale consists of 19 items divided into three subscales. The 7-item *Sex Therapy Skills* subscale (*Skills Self-Efficacy*) assesses self-efficacy concerning knowledge of and ability to utilize sex therapy techniques and treat specific sexual problems. The 7-item *Relaying Sexual Information* subscale (*Information Self-Efficacy*) assesses self-efficacy concerning one's ability to relay accurate information. The 5-item *Sexual Comfort/Bias* subscale (*Comfort/Bias Self-Efficacy*) measures self-efficacy regarding one's ability to appear comfortable

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discussing sexual issues and prevent personal biases from interfering with treatment.

Development

Forty-three items were developed based on existing counseling self-efficacy measures and the self-efficacy and sex therapy literatures (Al-Darmaki, 2004; Bandura, 1997; Forester, Kahn, & Hesson-McInnis, 2004; Harvey & McMurray, 1994; Holden, Anastas, Meenaghan, & Metrey, 2002) to represent four conceptual factors: Sex Therapy Skills, Relaying Sexual Information, Exhibiting Comfort with Sexual Topics, and Exhibiting Personal Bias. The scale was reduced to 23 items based on responses and feedback from 12 clinical psychology graduate students. Factor analysis on responses provided by graduate students in clinical and counselling psychology revealed that the scale is best represented by three factors; specifically, Exhibiting Comfort with Sexual Topics and Exhibiting Personal Bias were combined into one factor. Four items with low loadings were removed from the scale, leaving a final scale with a total of 19 items.

Response Mode and Timing

Responses for all items are made on a 6-point Likert scale ranging from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*). The scale takes about 5 minutes to complete.

Scoring

Items for each subscale include:

Relaying Sexual Information Self-Efficacy: Items 13a to 13g

Sex Therapy Skills Self-Efficacy: Items 1, 3, 5, 6, 8, 10, 12

Comfort/Bias Self-Efficacy: Items 2, 4, 7, 9, 11

Three items on the *Sex Therapy Skills* (Items 1, 3, and 8) and three items on the *Sexual Comfort/Bias* (Items 2, 9, and 11) subscales are reverse scored. Responses are then summed for each subscale separately. Thus, scores for both the 7-item *Sex Therapy Skills* and *Relaying Sexual Information* subscales range from 7 to 42; scores for the 5-item *Sexual Comfort/Bias* subscale scores range from 5 to 30. Higher scores represent stronger feelings of self-efficacy. Miller and Byers (2012) reported the following total scores in their sample of practicing clinical psychologists: *Skills Self-Efficacy* M =28.29, SD = 7.35; *Information Self-Efficacy* M = 31.83, SD = 5.89, *Comfort/Bias Self-Efficacy* M = 24.28 SD = 3.60. Comparison of mean scores (to take into account the different number of items on each scale) revealed that *Comfort/Bias Self-Efficacy* was significantly higher than *Information Self-Efficacy*, which was significantly higher than *Skills Self-Efficacy*.

Reliability

Miller and Byers (2008, 2012) have demonstrated that all of the subscales on the Sexual Intervention Self-Efficacy Scale have moderate to high internal consistency with both clinical psychology graduate students and practicing clinical psychologists: *Sex Therapy Skills* α = .97 and .88, respectively; *Relaying Sexual Information* α = .88 and .82, respectively; *Sexual Comfort/Bias* α = .73 and .64, respectively. Internal consistency was also high for the total score: .88 and .92, respectively.

Validity

The Sexual Intervention Self-Efficacy Scale has good content validity because it was constructed using information and feedback from practicing clinical psychologists, clinical psychology graduate students, and using research and theory related to self-efficacy and sexuality. Miller and Byers (2008, 2012) provide evidence for the concurrent construct and discriminant validity of the scale in studies with clinical psychology graduate students and practicing clinical psychologists. First, the three self-efficacy scales were significantly positively correlated, yet distinct, providing evidence for their construct validity. Second, all three forms of self-efficacy were significantly correlated with willingness to treat clients who have sexual concerns/problems. *Skills Self-Efficacy* and *Information Self-Efficacy* also were significantly correlated with the percent of clients for whom they had asked about and/or treated sexual concerns. These findings provide evidence for the concurrent validity of these subscales. Third, *Skills Self-Efficacy* and *Information Self-Efficacy* were positively related to extent of sexuality education, vicarious and actual therapy experience, and independent study, providing evidence for the construct validity of these scales. *Comfort Self-Efficacy* was positively associated with sexual conservatism/liberalism providing evidence for its construct validity. Fourth, neither *Information Self-Efficacy* nor *Comfort Self-Efficacy* were significantly correlated with years of graduate education, providing evidence for their discriminant validity.

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Exhibit

Sexual Intervention Self-Efficacy Questionnaire

The following questionnaire asks about your thoughts and feelings concerning your *current* ability to work with individuals who have sexual concerns/problems. Please indicate the degree to which you agree/disagree with each statement on the following scale:

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. I have very little knowledge of the interventions used to treat sexual problems.	1	2	3	4	5	6
2. There are issues related to sexuality that I would not feel comfortable talking to a client about.	1	2	3	4	5	6
3. I am unfamiliar with the techniques used to intervene with individuals who have sexual concerns/problems.	1	2	3	4	5	6
4. I am fairly certain that my own biases will not hinder my ability to effectively treat individuals who have sexual concerns/problems.	1	2	3	4	5	6
5. I know some techniques that can help couples who are having sexual problems.	1	2	3	4	5	6
6. I am able to teach clients specific skills to deal with their sexual concerns/problems.	1	2	3	4	5	6
7. I will be able to treat clients with sexual problems even when I don't necessarily agree with their decisions/actions.	1	2	3	4	5	6
8. Sexual dysfunction is something that I do not know how to treat.	1	2	3	4	5	6
9. I worry that I would seem uncomfortable if a client talked to me about masturbation.	1	2	3	4	5	6

10. I am able to use current research findings to intervene effectively with a client who has sexual concerns/problems.	1	2	3	4	5	6
11. I worry that I may seem awkward when working with gay and lesbian couples who have sexual difficulties in their relationship.	1	2	3	4	5	6
12. Sexual addiction/compulsion is something that I know how to treat.	1	2	3	4	5	6

13. I am confident that I can relay accurate information to clients about:

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
a. Sexual orientation/identity issues	1	2	3	4	5	6
b. Sexual violence	1	2	3	4	5	6
c. Sexual dysfunction and problems	1	2	3	4	5	6
d. STI/STDs	1	2	3	4	5	6
e. Conflict over sexual issues in relationships (e.g. differing sex drive)	1	2	3	4	5	6
f. Sexual issues in aging	1	2	3	4	5	6
g. Childhood/adolescent sexual development	1	2	3	4	5	6

8 Coercion and Consent

Tactics to Obtain Sex Scale

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The Tactics to Obtain Sex Scale (TOSS; Camilleri, Quinsey, & Tapscott, 2009) is a 31-item self-report attitude measure with two subscales designed to evaluate a person's current propensity to engage in sexual coaxing or sexual coercion with one's sexual partner.

Previous measures of partner sexual coercion evaluated the frequency and severity of sexual coercion in relationships (e.g., Shackelford & Goetz, 2004; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Using these temporally fixed dynamic variables (i.e., historical events, such as history of alcohol abuse) limits assessments to determining the presence of partner sexual coercion and limits research to quasi-experimental designs. If, however, clinicians or researchers are interested in changes in risk before and after treatment or after experimental manipulation, they require measures that are sensitive to proximal change in risk, known as *temporally variable dynamic variables* (e.g., being intoxicated; see Quinsey, Jones, Book, & Barr, 2006). Examples of measures that assess sexual coercion propensity include the various rape attitude and empathy measures (e.g., Deitz, Blackwell, Daley, & Bentley, 1982; Payne, Lonsway, & Fitzgerald, 1999), but none are specific to sexual offending in relationships.

Because the behaviors people use to obtain sex vary, a comprehensive measure of tactics people use also needs to capture benign and seductive tactics, known as *sexual coaxing* (Camilleri et al., 2009). Because sexual coaxing is more prevalent than sexual coercion, and only one measure exists to evaluate past instances of sexual coaxing in relationships (Jesser, 1978), a subscale that evaluates current propensity for sexual coaxing could be useful for couples' research.

Development

Thirty-six items that varied on sexual coercion and sexual coaxing, and on verbal and physical acts, were initially selected from behaviors described in the literature and from the author's clinical experience and research. Factor analytic techniques reduced the number of items and confirmed a two-factor structure: 19 tactics were sexually coercive (COERCE) and 12 tactics were sexually coaxing (COAX).

The TOSS was developed and validated among student and community participants who were sexually active in heterosexual dating, cohabiting, common-law, or marital relationships.

Response Mode and Timing

To evaluate current propensity, participants are asked how they would respond to a hypothetical situation—their partner refusing sexual intercourse that evening. Given that scenario, participants rate a total of 31 items in terms of how likely they would be to use each tactic and how effective each tactic would be for obtaining sex on a 5-point scale ranging from 0 (*definitely not*) to 4 (*definitely*). Current propensity was therefore defined as a respondent reporting a high likelihood of using tactics that the individual considered to be effective in obtaining sex from a reluctant partner.

Participants should complete the TOSS in a private room using either a paper-and-pencil format or a computer program that randomizes item order. Internal consistency and factor structure are similar across modalities (Camilleri et al., 2009). It should take participants no longer than 10 minutes to complete the TOSS.

Scoring

Likelihood and effectiveness ratings are summed for each item. Then, sexual coercion item total scores are summed for the partner sexual coercion subscale (*COERCE*), and sexual coaxing item total scores are summed for the partner sexual coaxing subscale (*COAX*). *COERCE* items include Items 2, 3, 5, 6, 8, 9, 11, 12, 13, 16, 17, 18, 23, 24,

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26, 27, 28, 29, and 31. *COERCE* scores can range from 0 to 152, where higher scores indicate a greater current propensity for partner sexual coercion. *COAX* items include Items 1, 4, 7, 10, 14, 15, 19, 20, 21, 22, 25, and 30. *COAX* scores range from 0 to 96, where higher scores indicate a greater current propensity for partner sexual coaxing. A total TOSS score could also be calculated by summing *COAX* and *COERCE* total scores. Higher scores would indicate a higher propensity for using any tactic to obtain sex from a partner.

Reliability

Camilleri et al. (2009) reported internal consistency estimates that ranged from .87 to .89 (*COERCE*); .92 to .93 (*COAX*); and .90 to .91 (TOSS).

Validity

Construct validity of the TOSS was established by finding significant correlations between the COERCE subscale and other measures of antisociality, including psychopathy and attraction to sexual aggression, whereas significant correlations were found between COAX and measures of general sexual interest measures and self-perceived mating success (Camilleri & Quinsey, 2009a; Camilleri et al., 2009).

Initial criterion validity of the TOSS was demonstrated by a relationship between *COERCE* and sexually coercive behaviors with one's partner in the last month and year, and no relationship with nonsexual violence against a partner. *COAX*, on the other hand, correlated with instances of signaling sexual interest with one's partner.

Temporal sensitivity of the *COERCE* subscale is supported by finding higher scores among men who experienced many recent cues to infidelity than men who did not experience such cues (Camilleri & Quinsey, 2009b). Temporal sensitivity of *COAX* was supported by finding scores varied by age and finding lower *COAX* scores among younger participants who were in committed relationships (common-law or marital) than dating or cohabiting relationships (Camilleri et al., 2009).

Other Information

Because of its unique properties, the TOSS has been used to test novel hypotheses about individual difference characteristics and social predictors of sexually coercive and sexually coaxing behaviors in relationships (Camilleri & Quinsey, 2009a, 2009b). Not only are further psychometric refinements to the scale possible and encouraged, but I hope this scale encourages further discourse into the causes and consequences of sexual conflict in relationships. The scale could be further validated among clinical and correctional populations and used experimentally to measure changes in coercive and coaxing interests.

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Exhibit

Tactics to Obtain Sex Scale

Suppose you were with your partner this evening, and he/she did not want to have sex with you: Please rate *how effective* the following acts would be to persuade your partner into having sex. Remember, you may skip questions you are uncomfortable in answering.

	0 Definitely Not	1 Unlikely	2 Maybe	3 Probably	4 Definitely
1. Massage his/her neck or back.	○	○	○	○	○
2. Threaten to leave.	○	○	○	○	○
3. Try to make him/her feel bad about not having sex.	○	○	○	○	○
4. Play with his/her hair.	○	○	○	○	○
5. Suggest you may harm him/her.	○	○	○	○	○
6. Offer to buy him/her something.	○	○	○	○	○
7. Lie down near him/her.	○	○	○	○	○
8. Tie partner up.	○	○	○	○	○
9. Block partner's retreat.	○	○	○	○	○
10. Tickle.	○	○	○	○	○
11. Provide him/her with drugs.	○	○	○	○	○
12. Call him/her names.	○	○	○	○	○
13. Threaten self-harm.	○	○	○	○	○
14. Massage feet/thighs.	○	○	○	○	○
15. Use humor.	○	○	○	○	○
16. Say you might break partner's property.	○	○	○	○	○
17. Wait until he/she is sleeping.	○	○	○	○	○
18. Attempt to blackmail.	○	○	○	○	○
19. Caress near/on partner's genitals.	○	○	○	○	○
20. Rub leg with his/her legs.	○	○	○	○	○
21. Whisper in his/her ear.	○	○	○	○	○
22. Softly kiss his/her ears, neck, or face.	○	○	○	○	○
23. Question partner's sexual orientation.	○	○	○	○	○
24. Break partner's property.	○	○	○	○	○
25. Say sweet things.	○	○	○	○	○
26. Provide him/her with alcohol.	○	○	○	○	○
27. Explain that your needs should be met.	○	○	○	○	○
28. Take advantage of him/her if she's already drunk or stoned.	○	○	○	○	○
29. Slap or hit.	○	○	○	○	○
30. Caress his/her chest/breasts.	○	○	○	○	○
31. Physically restrain.	○	○	○	○	○

Suppose you were with your partner this evening, and he/she did not want to have sex with you: Please rate *how likely* you would engage in the following acts to persuade your partner into having sex. Remember, you may skip questions you are uncomfortable in answering.

	0 Definitely Not	1 Unlikely	2 Maybe	3 Probably	4 Definitely
1. Massage his/her neck or back.	○	○	○	○	○
2. Threaten to leave.	○	○	○	○	○
3. Try to make him/her feel bad about not having sex.	○	○	○	○	○
4. Play with his/her hair.	○	○	○	○	○
5. Suggest you may harm him/her.	○	○	○	○	○
6. Offer to buy him/her something.	○	○	○	○	○
7. Lie down near him/her.	○	○	○	○	○
8. Tie partner up.	○	○	○	○	○
9. Block partner's retreat.	○	○	○	○	○
10. Tickle.	○	○	○	○	○
11. Provide him/her with drugs.	○	○	○	○	○
12. Call him/her names.	○	○	○	○	○

13. Threaten self-harm.	○	○	○	○	○
14. Massage feet/thighs.	○	○	○	○	○
15. Use humor.	○	○	○	○	○
16. Say you might break partner's property.	○	○	○	○	○
17. Wait until he/she is sleeping.	○	○	○	○	○
18. Attempt to blackmail.	○	○	○	○	○
19. Caress near/on partner's genitals.	○	○	○	○	○
20. Rub leg with his/her legs.	○	○	○	○	○
21. Whisper in his/her ear.	○	○	○	○	○
22. Softly kiss his/her ears, neck, or face.	○	○	○	○	○
23. Question partner's sexual orientation.	○	○	○	○	○
24. Break partner's property.	○	○	○	○	○
25. Say sweet things.	○	○	○	○	○
26. Provide him/her with alcohol.	○	○	○	○	○
27. Explain that your needs should be met.	○	○	○	○	○
28. Take advantage of him/her if she's already drunk or stoned.	○	○	○	○	○
29. Slap or hit.	○	○	○	○	○
30. Caress his/her chest/breasts.	○	○	○	○	○
31. Physically restrain.	○	○	○	○	○

Revised Sexual Coercion Inventory

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The Sexual Coercion Inventory (SCI; Waldner, Vaden-Goad, & Sikka, 1999) was revised for greater psychometric support (SCI-R; French, Suh, & Arterberry, 2017) and is a 17-item self-report measure of sexual victimization. This multidimensional measure consists of two factors: *Manipulation* and *Substance Use & Aggression*. The SCI-R may be a useful tool for researchers to explore manipulation tactics in more depth while also assessing and differentiating between victimization that meets legal definitions of rape and non-criminal sexual victimization.

Development

The SCI (Waldner et al., 1999) was developed with behaviorally specific items for assessing verbal coercion and manipulation tactics with a more nuanced assessment of subtle sexually coercive experiences. Although verbal coercion is not criminal in nature, assessing for these experiences has particularly important implications for sexual violence prevention. For example, such assessments could be used to identify areas to intervene prior to more severe or violent acts of sexual victimization. As Post et al. (2011) stated, "the scope of measurement must be able to identify a wide range of behaviors and be useful to myriad stakeholders, including victims, advocates, researchers, and policy makers" (p. 116).

The original 14-item SCI was created based on research by Christopher (1988), Muehlenhard and Cook (1988), and Struckman-Johnson (1988) and measures sexual victimization across tactics including verbal pressure, manipulation, rumor spreading, guilt, blocking exits, sexual arousal, intoxication, threatened force, and inflicted force. In the Revised SCI (SCI-R), three items were added to create a 17-item scale to assess and distinguish between substance-facilitated and incapacitated sexual coercion, as supported in sexual violence literature (McCauley et al., 2010). The SCI has been used to create researcher constructed scales (Schatzel-Murphy, Harris, Knight, & Milburn, 2009) and

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has been conceptualized as being multidimensional based on extant literature (French & Neville, 2013).

Exploratory factor analysis was conducted with a sample consisting of 118 (23%) high school students and 394 (77%) college students. The majority of the sample was female (56.4%) and the largest racial group was White (40.4%), followed by Black (22.5%), Asian (19.7%), and Latina/o/x (12%). Participant ages ranged from 14 to 26 years with a mean age of 18.45 (*SD* = 1.36) years. One item, "A sexual partner threatened to use or did use a weapon," was eliminated due to zero endorsement. Subsequent analyses were conducted using 16 items. We conducted Velicer's MAP test to explore the possible number of factors, which resulted in a two-factor solution. Following best practices in scale construction and validation (Worthington & Whittaker, 2006) an EFA using principal-axis procedures and promax rotation (an oblique rotation) was performed on the remaining 16 items. Three of the remaining items showed low factor loadings (less than .3) in the initial factor analysis and were thus removed from the factor analysis (Items 1 "a sexual partner has threatened to stop seeing me," 5 "a sexual partner has encouraged me to drink and then took advantage of me sexually," and 9 "a sexual partner has encouraged me to use drugs and then took advantage of me sexually"). However, we recommend using these 4 items in the calculation of the total scale score (see Scoring).

With the remaining 13 items, the data were shown to be suitable for structure detection through factor analysis (Kaiser-Meyer-Olkin [KMO] = .637, Bartlett's test = 1840.030, $df = 78$, $p < .001$). We ran EFA with principal axis factoring and promax rotation, and a two-factor solution was shown to be the best-fitting model. Factor 1, *Manipulation*, consisted of six items and Factor 2, *Substance Use and Aggression*, consisted of seven items. The full model accounted for 41.143 percent of variance; however, only one item fell below .30 for communality. The first factor, *Manipulation*, accounted for the most variance (26.73%), and the second factor, *Substance Use and Aggression*, accounted for 14.41 percent of variance. All factors loaded above .30. Descriptive statistics for SCI-R factors are presented in Table 1 (French, Suh, & Arterberry, 2017).

TABLE 1
Group Differences in SCI-R Factors by Education and Gender

	Manipulation				Substance Use & Aggression			
	n	*M*	*SD*	*F*	*n*	*M*	*SD*	*F*
Female	289	2.25	4.12	11.15***	289	0.76	2.42	11.24***
Male	223	1.21	2.58		223	0.18	0.97	
High School	118	2.13	4.32	1.37	118	0.47	1.92	0.04
College	394	1.69	3.31		394	0.52	1.96	

***$p < .001$

Response Mode and Timing

The SCI was originally scored item by item to assess individual tactics (analyses conducted with a small college student sample in India (N = 137; Waldner et al., 1999). In the revised SCI-R, participants were asked to indicate the resulting sexual behavior of each incident, ranked on a continuum of severity: 1 = *kissing/fondling*, 2 = *attempted oral, anal, or vaginal sexual intercourse*, and 3 = *completed oral, anal, or vaginal intercourse*; a score of 0 was assigned to individuals who did not report sexual coercion of that type. Based on the extant literature (Koss et al., 1987), we slightly modified the sexual behavior response options from the original scale to combine kissing, touching breasts, and touching genitals into one outcome—kissing/fondling—and included attempted oral, anal, or vaginal intercourse, whereas the original scale did not distinguish between attempted or completed intercourse. Completion takes about 5 minutes.

Scoring

Scoring is summed across items in the Likert scale for either a total scale score or subscale scores. No items are reverse coded. Higher scores indicate greater experience of sexual coercion.

For unweighted score (to assess victimization rates):

Score 1 if participant indicated "Yes, this happened to me."

Score 0 if participant indicated "No, this did not happen to me."

Items are summed.

For weighted scores (to assess victimization based on severity):

If participant indicated "Yes" to an item, score ranges from 1–3 based on response: 1 = kissing/fondling, 2 = attempted sexual intercourse, 3 = completed sexual intercourse.

If participant indicated "No" to an item, score = 0.

Items are summed.

When multiple sexual behavior outcomes are reported for a given victimization item, we recommend users categorize the response by the most severe outcome, based on the extant literature. Instructions ask participants to provide information for the most severe experience, and to distinguish from childhood sexual abuse.

Subscales based on French et al. (2017):

Manipulation = Items 4, 6, 7, 11, 12, 13

Substance Use and Aggression = Items 2, 3, 8, 10, 14, 16, 17

Items 1, 5, 9, and 15 were not retained in EFA and thus are not represented in subscale scores (however we recommend using them for the total scale score).

Reliability

Cronbach's alpha for the total scale was .91; it was .71 for *Manipulation* and .69 for *Substance Use and Aggression* (N = 512; French et al., 2017). Although meeting a .80 threshold would be ideal, the estimates obtained were considered acceptable, being close to or higher than .70 (Schmitt, 1996). The lower reliability estimates could be due to the nature of the scale, a behavioral index of sexual coercion with low endorsements across some items, and one type of coercion experience not necessarily relating to experiencing another type of coercion.

Validity

Convergent and discriminant validity was examined by comparing how the SCI-R correlated with other study variables (French et al., 2017). Both factors, *Manipulation* and *Substance Use and Aggression*, of the SCI-R showed stronger correlations with the widely used Sexual Experiences Survey (Koss & Oros, 1982; r = .40, $p < .001$, $N = 512$; $r = .36$, $p < .001$, $N = 512$, respectively) than the Sexual Abuse subscale of the Childhood Trauma Questionnaire (Bernstein & Fink, 1998; $r = .18$, $p < .001$, $N = 512$; $r = .20$, $p < .001$, $N = 512$, respectively). To explore construct validity, tests of group differences for the SCI-R were performed using ANOVA analyses. Consistent with our hypothesis, a significant gender difference was found for both factors—*Manipulation* and *Substance Use and Aggression*—such that women showed greater endorsement of those factors than men. Contrary to our hypothesis, group differences were not found for education level.

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Exhibit

Revised Sexual Coercion Inventory

Directions: Sometimes in a relationship, one partner wants to become more sexually involved than the other does. For the following list, indicate whether you have ever been pressured by a peer to engage in sexual behaviors (meaning vaginal, oral, or anal intercourse) even though you did *not* want to participate. For this questionnaire, only refer to sexual experiences *with a non-relative peer* (such as a boyfriend/girlfriend, friend, acquaintance, stranger, etc. but *do not* include potential sexual experiences with a family member) since you were 12 years old.

If the type of incident happened to you, indicate if it resulted in kissing and/or fondling, attempted sexual intercourse, or completed sexual intercourse. If you have had more than one experience with an incident that resulted in the same level of severity (such as two different people have threatened to stop seeing you if you didn't have sex and they *both* resulted in completed sexual intercourse) please provide the information for the *last* event that occurred

It is important that you answer all questions honestly to the best of your ability. All information you provide will remain confidential.

	Has this ever happened to you?		If this happened to you, indicate the most severe sexual behavior this resulted in.		
	Yes	No	Kissing and/or fondling	Attempted sexual intercourse	Completed sexual intercourse
1. A sexual partner has threatened to stop seeing me.	○	○	○	○	○
2. A sexual partner has given me alcohol without my knowledge and then took advantage of me sexually.	○	○	○	○	○
3. A sexual partner has threatened to tell lies about me.	○	○	○	○	○
4. A sexual partner has threatened to tell private things about me.	○	○	○	○	○
5. A sexual partner has encouraged me to drink and then took advantage of me sexually.	○	○	○	○	○
6. A sexual partner has said things to make me feel guilty (e.g., "it's your duty").	○	○	○	○	○
7. A sexual partner has begged me and would not stop until I agreed.	○	○	○	○	○
8. A sexual partner has given me drugs without my knowledge and then took advantage of me sexually.	○	○	○	○	○
9. A sexual partner has encouraged me to use drugs and then took advantage of me sexually.	○	○	○	○	○
10. A sexual partner would not let me leave although I wanted to go.	○	○	○	○	○
11. A sexual partner has tried to interest me by touching me sexually but I was not interested.	○	○	○	○	○
12. A sexual partner has made false promises (e.g., "We'll get married").	○	○	○	○	○
13. A sexual partner has said things that later proved to be untrue (e.g., "I love you").	○	○	○	○	○
14. A sexual partner has physically held me down.	○	○	○	○	○
15. A sexual has partner threatened to use or did use a weapon.	○	○	○	○	○
16. A sexual partner has threatened to use physical force (e.g., slapping, hitting).	○	○	○	○	○
17. A sexual partner has used physical force.	○	○	○	○	○

Sexual Coercion in Intimate Relationships Scale

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Sexual coercion sometimes includes violence and physical force, and in an intimate relationship also may include subtle tactics, such as emotional manipulation. Because relationship partners have a vested interest in each other, one might expect that sexual coercion is sometimes achieved by more subtle manipulations. We developed the Sexual Coercion in Intimate Relationships Scale (SCIRS) to assess the prevalence and severity of varied forms of sexual coercion in relationships.

Although other measures of sexual coercion exist, we developed the SCIRS to address limitations of these measures. Previous measures assess the lifetime occurrence of sexually coercive acts but not the frequency and severity of these acts. Also, because some measures of sexual coercion assess lifetime experience with sexual coercion, they cannot differentiate sexual coercion by an intimate partner and, for example, molestation experienced in childhood. Finally, although some measures of sexual coercion include assessments of threats as coercive tactics, they are not able to differentiate types of threats (e.g., threats of physical harm, threats to terminate the relationship).

The 34 SCIRS items assess communicative tactics, such as hinting and subtle manipulations, in addition to tactics such as use of force. The SCIRS assesses use of psychological and behavioral tactics of sexual coercion, such as threats, withholding of resources, and violence. The SCIRS also assesses the use of tactics that range in subtlety.

Studies using the SCIRS have secured data primarily from heterosexual young adults (mean age 24 years) residing in North America.

Response Mode and Timing

The SCIRS is a self-administered survey but can be adapted for an interview, and standardized instructions make self-administration uncomplicated. When self-administered, the SCIRS takes about 10 minutes to complete. Although the SCIRS assesses men's sexual coercion in the past month, one can adjust this period to assess the success of an intervention program, for example.

The SCIRS uses a 6-point scale to assess how often in the past month each of 34 acts has occurred in the participant's relationship. Values are: 0 (*Act did not occur*), 1 (*Act occurred 1 time*), 2 (*Act occurred 2 times*), 3 (*Act occurred 3 to 5 times*), 4 (*Act occurred 6 to 10 times*), 5 (*Act occurred 11 or more times*).

A male version of the SCIRS assesses men's self-reports of their own sexually coercive behaviors, whereas a female version assesses women's reports of their partner's sexually coercive behaviors.

Scoring

Full-scale scores are calculated by summing response values (0–5) for each item in the entire scale. The full scale has a range of 0 to 170 (34 acts × 5). Shackelford and Goetz (2004) conducted a component analysis that produced three components: *Resource Manipulation/Violence* (Items 1, 2, 3, 4, 5, 6, 9, 10, 11, 17, 22, 23, 31, 32, and 33), *Commitment Manipulation* (Items 7, 8, 12, 15, 18, 19, 20, 21, 30, and 34), and *Defection Threat* (Items 13, 14, 16, 17, 24, 25, 26, 27, 28, and 29). *Resource Manipulation/Violence* includes coercive acts in which men withhold or give gifts and benefits and threaten or use violence and physical force. *Commitment Manipulation* includes coercive acts in which men manipulate their partners by telling them that the couple's relationship status obligates sexual access. *Defection Threat* includes coercive acts in which men threaten to pursue relationships with other women.

Reliability

In all studies in which the SCIRS has been used, acceptable reliabilities have been observed, using male samples, female samples, and a combination of both. For example, alpha reliabilities for the three components (*Resource Manipulation/Violence, Commitment Manipulation*, and *Defection Threat*) and the total scale were .92, .91, .95, and .96, respectively, in the development and initial validation of the SCIRS (Shackelford & Goetz, 2004).

Validity

A valid measure of sexual coercion might be expected to (a) illustrate that women who are sexually coerced are less satisfied with their relationships, (b) reflect personality differences between men who sexually coerce and those who do not, and (c) differentiate men who would be more upset from those who would be less upset by their partners' denials of sexual access. These predictions have received support. Relationships between men's sexual coercion and women's

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relationship satisfaction are negative (Shackelford & Goetz, 2004); men who are lower (relative to men who are higher) on conscientiousness are more likely to sexually coerce their partners (Goetz & Shackelford, 2009); and the more that men report being upset if their partners denied them sexual access, the more sexually coercive these men are (Shackelford & Goetz, 2004).

The SCIRS also has demonstrated convergent and discriminative validity. Correlations between SCIRS scores and scores on a sexual coercion subscale of the Violence Assessment Index are positive and statistically significant, according to men's self-reports and women's partner-reports (Shackelford & Goetz, 2004). Correlations between SCIRS scores and scores on the Controlling Behavior Index (Dobash, Dobash, Cavanagh, & Lewis, 1995), Violence Assessment Index (Dobash et al., 1995), Injury Assessment Index (Dobash et al., 1995), Women's Experience with Battering Scale (Smith, Earp, & DeVellis, 1995), Mate Retention Inventory (Buss, Shackelford, & McKibbin, 2008), and Partner-Directed Insults Scale (Goetz, Shackelford, Schipper, & Stewart-Williams, 2006) are uniformly positive but do not share more than 20 percent of the response variance, providing evidence of convergent and discriminative validity of the SCIRS (Buss et al., 2008; Goetz & Shackelford, 2006; Shackelford & Goetz, 2004; Starratt, Goetz, Shackelford, McKibbin, & Stewart-Williams, 2008; Starratt, Popp, & Shackelford, 2008). These correlations suggest that the SCIRS measures behaviors that are related to, but distinct from, nonsexual violence and control.

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Exhibit

Sexual Coercion in Intimate Relationship Scale

Sexuality is an important part of romantic relationships and can sometimes be a source of conflict. Your honest responses to the following questions will contribute profoundly to what is known about sexuality in romantic relationships and may help couples improve the sexual aspects of their relationships. We appreciate that some of the questions may be uncomfortable for you to answer, but keep in mind that your responses will remain confidential.

Below is a list of acts that can occur in a romantic relationship. Please use the following scale to indicate *how often* in the past *one* month these acts have occurred in your current romantic relationship. Write the number that best represents your response in the blank space to the left of each act.

	0 Act did *not* occur in the past month	1 Act occurred 1 time in the past month	2 Act occurred 2 times in the past month	3 Act occurred 3 to 5 times in the past month	4 Act occurred 6 to 10 times in the past month	5 Act occurred 11 or more times in the past month
1. My partner hinted that he would withhold benefits that I depend on if I did not have sex with him.	○	○	○	○	○	○
2. My partner threatened to withhold benefits that I depend on if I did not have sex with him.	○	○	○	○	○	○

3. My partner withheld benefits that I depend on to get me to have sex with him.	○	○	○	○	○	○
4. My partner hinted that he would give me gifts or other benefits if I had sex with him.	○	○	○	○	○	○
5. My partner gave me gifts or other benefits so that I would feel obligated to have sex with him.	○	○	○	○	○	○
6. My partner reminded me of gifts or other benefits he gave me so that I would feel obligated to have sex with him.	○	○	○	○	○	○
7. My partner persisted in asking me to have sex with him, even though he knew that I did not want to.	○	○	○	○	○	○
8. My partner pressured me to have sex with him against my will.	○	○	○	○	○	○
9. My partner initiated sex with me when I was unaware (for example, I was asleep, drunk, or on medication) and continued against my will.	○	○	○	○	○	○
10. My partner threatened to physically force me to have sex with him.	○	○	○	○	○	○
11. My partner physically forced me to have sex with him.	○	○	○	○	○	○
12. My partner made me feel obligated to have sex with him.	○	○	○	○	○	○
13. My partner hinted that he would have sex with another woman if I did not have sex with him.	○	○	○	○	○	○
14. My partner threatened to have sex with another woman if I did not have sex with him.	○	○	○	○	○	○
15. My partner told me that other couples have sex more than we do, to make me feel like I should have sex with him.	○	○	○	○	○	○
16. My partner hinted that he might pursue a long-term relationship with another woman if I did not have sex with him.	○	○	○	○	○	○
17. My partner threatened to pursue a long-term relationship with another woman if I did not have sex with him.	○	○	○	○	○	○
18. My partner hinted that if I were truly committed to him I would have sex with him.	○	○	○	○	○	○
19. My partner told me that if I were truly committed to him I would have sex with him.	○	○	○	○	○	○
20. My partner hinted that if I loved him I would have sex with him.	○	○	○	○	○	○
21. My partner told me that if I loved him I would have sex with him.	○	○	○	○	○	○
22. My partner threatened violence against me if I did not have sex with him.	○	○	○	○	○	○
23. My partner threatened violence against someone or something I care about if I did not have sex with him.	○	○	○	○	○	○

24. My partner hinted that other women were interested in a relationship with him, so that I would have sex with him.	○	○	○	○	○	○
25. My partner told me that other women were interested in a relationship with him, so that I would have sex with him.	○	○	○	○	○	○
26. My partner hinted that other women were interested in having sex with him, so that I would have sex with him.	○	○	○	○	○	○
27. My partner told me that other women were interested in having sex with him, so that I would have sex with him.	○	○	○	○	○	○
28. My partner hinted that other women were willing to have sex with him, so that I would have sex with him.	○	○	○	○	○	○
29. My partner told me that other women were willing to have sex with him, so that I would have sex with him.	○	○	○	○	○	○
30. My partner hinted that it was my obligation or duty to have sex with him.	○	○	○	○	○	○
31. My partner told me that it was my obligation or duty to have sex with him.	○	○	○	○	○	○
32. My partner hinted that I was cheating on him, in an effort to get me to have sex with him.	○	○	○	○	○	○
33. My partner accused me of cheating on him, in an effort to get me to have sex with him.	○	○	○	○	○	○
34. My partner and I had sex, even though I did not want to.	○	○	○	○	○	○

Sexual Consent Scale, Revised

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The Sexual Consent Scale, Revised (SCS-R; Humphreys, 2004; Humphreys & Brousseau, 2010; Humphreys & Herold, 2007) was developed to assess attitudes and behaviors related to the negotiation of sexual consent between sexual partners. This scale was normed on heterosexual undergraduate students at three universities.

Development

The SCS was initially developed using semi-structured focus group interviews with university students to gain an initial understanding of the key themes regarding sexual consent negotiations. These themes were then translated into Likert-type items for the quantitative survey. Use of focus groups prior to developing the survey instrument improved the phrasing and relevance of the items, as well as ensuring adequate coverage of the topic area. The original SCS (Humphreys & Herold, 2007), is a 35-item scale containing two attitudinal subscales (*Asking for Consent First is Important, Commitment Reduces Asking for Consent*) and two behavioural subscales (*Consent Discussions/Awareness*, and *Consent is Negotiated Once)*.

The Theory of Planned Behavior (TPB; Ajzen, 1985, 2001, 2005) was used to redesign the original sexual

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consent scale to maximize its use as a predictive tool. Additional items were added to the SCS to ensure adequate coverage of the three predictors of behavioral intent in the TPB (i.e., attitude toward the action, subjective norms, and perceived behavioral control).

Factor analysis of the 39 SCS-R items was conducted using varimax rotation; three attitudinal subscales and two behavioral subscales were indicated. The three attitudinal subscales are: *Positive Attitude Towards Establishing Consent* (11 items; $M = 4.66$, $SD = .93$), *Lack of Perceived Behavioral Control* (11 items; $M = 3.10$, $SD = 1.04$), and *Sexual Consent Norms* (7 items; $M = 4.57$, $SD = .88$). The two behavioral subscales are *Indirect Consent Behaviors* (6 items; $M = 4.95$, $SD = 1.06$), and *Awareness of Consent* (4 items; $M = 3.55$, $SD = 1.39$). The final 39-item factor structure accounted for 45.3 percent of the variance (Humphreys & Brousseau, 2010).

Response Mode and Timing

The SCS-R is answered using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The SCS-R requires approximately 20 minutes to complete. Typically the order of the items is randomized prior to administration.

Scoring

To obtain subscale scores, add together the score on each item and divide by the number of items for each subscale. Items 11, 20, 22, 35, and 39 are reverse-scored. Items for each subscale are: *Positive Attitude Towards Establishing Consent*, Items 1–11; *Lack of Perceived Behavioral Control*, Items 12–22; *Sexual Consent Norms*, Items 23–29; *Indirect Consent Behaviors*, Items 30–35; and *Awareness of Consent*, Items 36–39.

Reliability

Based on the original data set of 372 completed surveys, the reliability for the whole SCS-R was .87 (Humphreys & Brousseau, 2010). Internal consistency for each subscale, using coefficient alpha, was as follows: *Positive Attitude Towards Establishing Consent* ($\alpha = .84$), *Lack of Perceived Behavioral Control* ($\alpha = .86$), *Sexual Consent Norms* ($\alpha = .67$), *Indirect Consent Behaviors* ($\alpha = .78$), and *Awareness of Consent* ($\alpha = .71$; Humphreys & Brousseau, 2010). Additional internal consistency data has been assessed using a sample of 925 sexually active, female college students (ages 18–25), at a large public university in the northeastern United States. The alphas were as follows: *Positive Attitude Towards Establishing Consent* ($\alpha = .82$), *Lack of Perceived Behavioral Control* ($\alpha = .91$), *Sexual Consent Norms* ($\alpha = .78$), *Indirect Consent Behaviors* ($\alpha = .55$), and *Awareness of Consent* ($\alpha = .75$; Fantasia, Fontenot, Sutherland, & Lee-St. John, 2015).

Test–retest reliability was conducted on a sample of 40 students over a 5-week interval. Coefficients for the five subscales ranged from .68 to .79 (Humphreys & Brousseau, 2010).

Validity

Construct validity was examined by comparing the five subscales of the SCS-R to two previously established scales: the Sexual Sensation Seeking Scale (SSSS; Kalichman & Rompa, 1995) and Hurlbert's Index of Sexual Assertiveness (HISA; Hurlbert, 1991). The SSSS assesses the willingness to take physical and social risks to achieve varied and novel sexual sensations and experiences. Given that establishing sexual consent is a "safe" behavior that guards against miscommunication and, possibly, coercion, there should be a logical connection between the two measures: As the trait of sensation seeking increases, the formal negotiation of sexual consent between sexual partners should decrease. Sensation seeking was negatively correlated with positive attitude towards establishing consent, $r(177) = -.23$, $p = .002$, and positively correlated with using more indirect consent behaviors, $r(176) = .20$, $p < .01$ (Humphreys & Brousseau, 2010).

Likewise, sexual assertiveness would be logically connected to sexual consent because both concepts are characterized by a willingness to communicate about sex. Assertive communication about sexuality includes aspects of consenting to sexual activity, such as initiating, talking about contraceptives, past partners, desires and general comfort (Morokoff et al., 1997). Sexual assertiveness was negatively correlated with a lack of perceived behavioral control, $r(342) = -.37$, $p < .001$, and positively correlated with awareness of consent issues, $r(342) = .26$, $p < .001$, and using more indirect consent behaviors, $r(342) = .23$, $p < .001$ (Humphreys & Brousseau, 2010).

Extending the Theory of Planned Behavior to sexual consent, the intent to negotiate sexual consent should be based on attitudes in favor of establishing consent first, perceived behavioral control, sexual consent norms, and past sexual behavior. Predictive validity was assessed by conducting a standard regression using *intent to verbally ask for sexual consent in the next five sexual encounters* (2 items) with the 5 subscales of the SCS-R. Being male ($B = -.40$, $\beta = -.16$), perceiving greater behavioral control over negotiating consent ($B = -.24$, $\beta = -.22$), having positive attitudes towards establishing consent before sexual activity begins ($B = .24$, $\beta = .20$), and using fewer indirect approaches to negotiate consent in the past ($B = -.42$, $\beta = -.41$) were all statistically unique predictors of the intent to verbally negotiate sexual consent in the near future, $F(6, 360) = 39.28$, $p < .001$, $R^2 = .40$ (Humphreys & Brousseau, 2009).

Logistic regression has demonstrated that greater awareness of consent and less use of nonverbal, indirect behavioural approaches to communicate sexual consent

are associated with a greater likelihood of having a history of forced sex (Fantasia et al., 2015). Although this finding appears counterintuitive and directionality cannot be established, it is likely that the experience of forced sex leads to increased awareness of consent issues and less use of indirect behaviours to communicate consent (in relation to those without a forced sex experience).

Hazardous drinking (as measured by the AUDIT-C) has been negatively correlated with *Positive Attitude Towards Establishing Consent* ($r = -.11$, $p = .02$), and positively correlated with *Lack of Perceived Behavioral Control* ($r = .18$, $p < .001$) and *Sexual Consent Norms* ($r = .16$, $p = .001$) (Fantasia et al., 2015).

Other Information

In the 3rd edition of the *Handbook of Sexuality-Related Measures*, the measure was published as a 40-item scale with 6 factors. Since that time, further development work was done, and Humphreys & Brousseau (2010) was published. It is recommended that researchers use the version of the scale published in Humphreys & Brousseau (2010), and described in this entry.

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Exhibit

Sexual Consent Scale, Revised

Please note that the term "sexual consent" is used extensively throughout this questionnaire. Please use the definition of sexual consent below when answering the questions that follow:

Sexual consent: the freely given verbal or non-verbal communication of a feeling of willingness to engage in sexual activity.

Using the following scale, please select the response that best describes how strongly you agree or disagree with each statement. Remember, there are no right or wrong answers, just your opinions.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neither Agree nor Disagree	5 Somewhat Agree	6 Agree	7 Strongly Agree
1. I feel that sexual consent should always be obtained before the start of any sexual activity.	○	○	○	○	○	○	○
2. I believe that asking for sexual consent is in my best interest because it reduces any misinterpretations that might arise.	○	○	○	○	○	○	○

3. I think it is equally important to obtain sexual consent in all relationships regardless of whether or not they have had sex before.	○	○	○	○	○	○	○
4. I feel that verbally asking for sexual consent should occur before proceeding with any sexual activity.	○	○	○	○	○	○	○
5. When initiating sexual activity, I believe that one should always assume they do not have sexual consent.	○	○	○	○	○	○	○
6. I believe that it is just as necessary to obtain consent for genital fondling as it is for sexual intercourse.	○	○	○	○	○	○	○
7. Most people that I care about feel that asking for sexual consent is something I should do.	○	○	○	○	○	○	○
8. I think that consent should be asked before any kind of sexual behaviour, including kissing or petting.	○	○	○	○	○	○	○
9. I feel it is the responsibility of both partners to make sure sexual consent is established before sexual activity begins.	○	○	○	○	○	○	○
10. Before making sexual advances, I think that one should assume 'no' until there is clear indication to proceed.	○	○	○	○	○	○	○
11. Not asking for sexual consent some of the time is okay.	○	○	○	○	○	○	○
12. I would have difficulty asking for consent because it would spoil the mood.	○	○	○	○	○	○	○
13. I am worried that my partner might think I'm weird or strange if I asked for sexual consent before starting any sexual activity.	○	○	○	○	○	○	○
14. I would have difficulty asking for consent because it doesn't really fit with how I like to engage in sexual activity.	○	○	○	○	○	○	○
15. I would worry that if other people knew I asked for sexual consent before starting sexual activity, that they would think I was weird or strange.	○	○	○	○	○	○	○
16. I think that verbally asking for sexual consent is awkward.	○	○	○	○	○	○	○
17. I have not asked for sexual consent (or given my consent) at times because I felt that it might backfire and I wouldn't end up having sex.	○	○	○	○	○	○	○

18. I believe that verbally asking for sexual consent reduces the pleasure of the encounter.	○	○	○	○	○	○	○
19. I would have a hard time verbalizing my consent in a sexual encounter because I am too shy.	○	○	○	○	○	○	○
20. I feel confident that I could ask for consent from a new sexual partner.	○	○	○	○	○	○	○
21. I would not want to ask a partner for consent because it would remind me that I'm sexually active.	○	○	○	○	○	○	○
22. I feel confident that I could ask for consent from my current partner.	○	○	○	○	○	○	○
23. I think that obtaining sexual consent is more necessary in a new relationship than in a committed relationship.	○	○	○	○	○	○	○
24. I think that obtaining sexual consent is more necessary in a casual sexual encounter than in a committed relationship.	○	○	○	○	○	○	○
25. I believe that the need for asking for sexual consent decreases as the length of an intimate relationship increases.	○	○	○	○	○	○	○
26. I believe it is enough to ask for consent at the beginning of a sexual encounter.	○	○	○	○	○	○	○
27. I believe that sexual intercourse is the only sexual activity that requires explicit verbal consent.	○	○	○	○	○	○	○
28. I believe that partners are less likely to ask for sexual consent the longer they are in a relationship.	○	○	○	○	○	○	○
29. If consent for sexual intercourse is established, petting and fondling can be assumed.	○	○	○	○	○	○	○
30. Typically I communicate sexual consent to my partner using nonverbal signals and body language.	○	○	○	○	○	○	○
31. It is easy to accurately read my current (or most recent) partner's non-verbal signals as indicating consent or non-consent to sexual activity.	○	○	○	○	○	○	○
32. Typically I ask for consent my making a sexual advance and waiting for a reaction, so I know whether or not to continue.	○	○	○	○	○	○	○
33. I don't have to ask or give my partner sexual consent because my partner knows me well enough.	○	○	○	○	○	○	○

34. I don't have to ask or give my partner sexual consent because I have a lot of trust in my partner to "do the right thing."	○	○	○	○	○	○	○
35. I always verbally ask for consent before I initiate a sexual encounter.	○	○	○	○	○	○	○
36. I have discussed sexual consent issues with a friend.	○	○	○	○	○	○	○
37. I have heard sexual consent issues being discussed by other students on campus.	○	○	○	○	○	○	○
38. I have discussed sexual consent issues with my current (or most recent) partner at times other than during sexual encounters.	○	○	○	○	○	○	○
39. I have not given much thought to the topic of sexual consent.	○	○	○	○	○	○	○

Female Sexual Resourcefulness Scale

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The Female Sexual Resourcefulness Scale (FSRS; Humphreys & Kennett, 2010) assesses the self-control strategies women use to deal with unwanted sexual encounters. Unwanted sexual encounters often involve some form of verbal and/or nonverbal persuasion on the part of the male, creating more perceived pressure on a woman to consent. Hence, being sexually resourceful empowers women with a variety of specific strategies for saying no or leaving the situation when in these circumstances.

Development

The FSRS was developed after Rosenbaum's (1990, 2000) model of self-control. The key component in this model is learned resourcefulness: the basic self-regulatory skills needed to handle everyday life challenges. Individuals possessing a large, general repertoire of learned resourcefulness skills make use of positive self-instructions, delay gratification, apply problem-solving methods, and employ other self-control strategies when dealing with negative emotions (Rosenbaum & Cohen, 1999), breaking bad habits (Kennett, Morris, & Bangs, 2006), adhering to medical regimens (Zauszniewski & Chung, 2001), carrying out boring but necessary tasks (Fast & Kennett, 2015), or overcoming other adversities they encounter (Kennett & Chislett, 2016). However, how readily one is able to draw on this general repertoire of well-learned skills depends on other factors. In particular, the extent to which a woman is able to be sexually resourceful when confronted with unwanted sexual advances depends on process regulating cognitions (PRCs) such as sexual self-efficacy (i.e., the belief that she is capable of stopping unwanted sexual advances/activities). These beliefs are shaped over time by the outcomes and personal explanations of past unwanted sexual experiences, and they are further affected by physiological (e.g., one's sexual arousal level) and situational (e.g., relationship status, sexual coercion, environmental setting) variables that interact among each other by either facilitating or preventing the use of specific sexual resourcefulness strategies to put a halt to the unwanted sexual advance.

Items for the FSRS were modeled after Rosenbaum's (1990, 2000) learned resourcefulness scale items, but designed more specifically for the context of unwanted sexual advances/activities, including the elements of positive self-instruction, delaying gratification, and problem-solving strategies.

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Response Mode and Timing

Participants respond on a 6-point Likert-type scale, with responses ranging from 1 (*very uncharacteristic of me*) to 6 (*very characteristic of me*). The FSRS takes approximately 10 min to complete.

Scoring

Items 2, 3, 5, 6, 7, 16, 17, 18 are reverse-scored. Total scores can range from 19 to 114. The mean scores on this inventory in our research have been: $M = 80.5$, $SD = 18.4$ ($N = 150$; Kennett, Humphreys, & Patchell, 2009), $M = 85.9$, $SD = 16.1$ ($N = 330$; Humphreys & Kennett, 2010), $M = 83.04$, $SD = 16.49$ ($N = 178$; Kennett, Humphreys, & Schultz, 2012), and $M = 78.17$, $SD = 15.52$ ($N = 246$; Kennett, Humphreys, & Bramley, 2013).

Reliability

Based on three female undergraduate data sets, the reliability for the FSRS was .91 ($N = 150$; Kennett et al., 2009), .91 ($N = 152$; Humphreys & Kennett, 2010), and .87 ($N = 246$; Kennett et al., 2013).

Over a 6-week period, test–retest reliability in a female student sample ($N = 63$) was .78 (Humphreys & Kennett, 2010).

Validity

Construct validity was examined by comparing the FSRS to previously established scales: the Self-Control Schedule (SCS; Rosenbaum, 1980) and the Sexual Experiences Survey (SES; Koss & Oros, 1982), as well as a number of newly designed scales: Sexual Self-Efficacy (Kennett et al., 2009), Reasons for Consenting to Unwanted Sex (Humphreys & Kennett, 2010; Kennett et al., 2009 and Sexual Giving-In Experiences (Kennett et al., 2009).

Demographically, FSRS is unrelated to age, relationship stage, or length of relationship. Instead, research has shown that women's past discussions about unwanted sex with their mothers and sexual education teachers were predictors of sexual resourcefulness (Kennett et al., 2012).

Rosenbaum's (1980) SCS measures an individual's general repertoire of learned resourcefulness skills, by assessing one's use of positive self-statements to control emotional and physiological responses and ability to problem solve and delay gratification. The FSRS was designed to be a specific type of learned resourcefulness focused on dealing with unwanted sexual situations. As predicted, the SCS and the FSRS are correlated, $r(330) = .38$ (Humphreys & Kennett, 2010); $r(150) = .38$ (Kennett et al., 2009); $r(178) = .35$ (Kennett et al., 2012); $r(246) = .31$ (Kennett et al., 2013). Again, as predicted, Kennett et al. (2009) found that the FSRS is negatively correlated with forced sex play (Items 1–3), $r(152) = -.49$, $p < .001$, and attempted or completed forced intercourse (Items 4–10), $r(152) = -.41$, $p < .001$, in the SES (Koss & Oros, 1982). In addition, FSRS was negatively correlated with a single item assessing the extent to which female students have experienced unwanted sexual advances from men, $r(152) = -.21$, $p = .008$ (Kennett et al., 2009). Therefore, being sexually resourceful is related to less involvement in unwanted and forced sexual situations.

The Sexual Self-Efficacy scale (Kennett et al., 2009) assesses women's belief that they have what it takes to deal with or prevent unwanted sexual advances. This 5-item scale was positively correlated with FSRS, with correlations ranging from .59 to .62 in the Humphreys and Kennett (2010) and Kennett et al. (2009, 2012, and 2013) studies. Clearly, believing that you have the ability to deal with unwanted sexual advances is positively linked with actually using a variety of resourcefulness skills when engaged in these situations.

The Reasons for Consenting to Unwanted Sex Scale (RCUSS; Kennett et al., 2009) assesses the amount of endorsement women give to a variety of reasons why they have voluntarily consented to engage in sexual activity they did not desire. Reasons for consent are in accordance with previous research suggesting that women consent to unwanted sexual activity to satisfy their partner's needs, promote intimacy, avoid tension, prevent a partner from losing interest in the relationship and/or fulfill perceived relationship obligations (Impett & Peplau, 2002; O'Sullivan & Allgeier, 1998; Shotland & Hunter, 1995). As predicted, the RCUSS negatively correlated with the FSRS $r(330) = -.71$ (Humphreys & Kennett, 2010); $r(150) = -.62$ (Kennett et al., 2009); $r(178) = -.55$ (Kennett et al., 2012); and $r(246) = -.67$ (Kennett et al., 2013). The FSRS was also negatively correlated with actual percentage of time women "gave in" to sexual experiences: $r(330) = -.59$ (Humphreys & Kennett, 2010); $r(150) = -.56$ (Kennett et al., 2009); $r(178) = -.48$ (Kennett et al., 2012); and $r(246) = -.55$ (Kennett et al., 2013).

Other Information

The FSRS was adapted for an undergraduate male sample (Quinn-Nilas, Kennett, & Humphreys, 2013). Aspects of the data reported here for female samples were replicated in the Quinn-Nilas et al. (2013) study.

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Exhibit

Female Sexual Resourcefulness Scale

This questionnaire is designed to find out how different people view their thinking and their behavior about unwanted sexual activities/advances.

Unwanted sexual advances/activities are defined as *anything from an unwanted intimate hand on the shoulder to unwanted sexual intercourse*. Other unwanted sexual advances/activity could include things such as verbal advances, touching, hugging, kissing, or dancing.

A statement may range from very uncharacteristic of you to very characteristic of you. Please answer every statement, and select only one answer for each statement. Use the following scale to indicate whether a statement describes your thinking or behavior.

	1 Very uncharacteristic of me	2 Rather uncharacteristic of me	3 Somewhat uncharacteristic of me	4 Somewhat characteristic of me	5 Rather characteristic of me	6 Very characteristic of me
1. When I am in the middle of sexual play and am aroused, but do not want the activity to progress any further, I am often able to change my aroused feelings so that I am able to prevent the activity from progressing.	○	○	○	○	○	○
2. I often give in to unwanted sexual activity.	○	○	○	○	○	○
3. When I feel upset while engaged in unwanted sexual activity, I try not to think about it.	○	○	○	○	○	○

4. When I am faced with unwanted sexual activity/ advances, I have no difficulty leaving the situation.	○	○	○	○	○	○
5. While engaged in unwanted sexual activity, I think I'm making a mistake, but I'm at a loss to do anything about it.	○	○	○	○	○	○
6. I usually consent to unwanted sexual activity when my partner is pressuring me.	○	○	○	○	○	○
7. When I am experiencing unwanted sexual activity/ advances, I prefer to not think about it and go along with the activity instead.	○	○	○	○	○	○
8. If I was in the middle of sexual play which I no longer wanted to continue, I could tell him to stop.	○	○	○	○	○	○
9. When I have become aroused from sexual play, but do not want to continue any further, I am able to resist engaging in the sexual activity by thinking about the good reasons for stopping.	○	○	○	○	○	○
10. Although I feel bad about hurting my partner's feelings, I am able to let him know when I am uncomfortable with a sexual situation.	○	○	○	○	○	○
11. I feel good about myself when I resist unwanted sexual advances.	○	○	○	○	○	○
12. When experiencing unwanted sexual activity/ advances, I often tell myself that I can do something about it.	○	○	○	○	○	○
13. When I am about to engage in unwanted sexual activity, I tell myself to stop and think before I do anything.	○	○	○	○	○	○
14. I consider my actions very carefully when deciding whether or not to participate in unwanted sexual activity.	○	○	○	○	○	○

15. I always have a back up plan for when I am faced with unwanted sexual advances/activity that get out of control.	○	○	○	○	○	○
16. It takes a lot of effort on my part to bring unwanted sexual advances/activity to a halt.	○	○	○	○	○	○
17. When presented with unwanted sexual advances/activity, I base my decision on my arousal and how I feel in the moment, even if I know I will regret it later.	○	○	○	○	○	○
18. When engaging in unwanted sexual activity, I try to divert my thoughts from how uncomfortable I feel.	○	○	○	○	○	○
19. I plan in advance how far I want to go with any sexual activity, and am able to stop the activity before it goes too far.	○	○	○	○	○	○

Reasons for Consenting to Unwanted Sex Scale

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The Reasons for Consenting to Unwanted Sex Scale (RCUSS; Humphreys & Kennett, 2010; Kennett, Humphreys and Bramley, 2013; Kennett, Humphreys & Patchell, 2009; Kennett, Humphreys, & Shultz, 2012) was developed to assess the amount of endorsement women give to a variety of reasons for why they have voluntarily consented to engage in sexual activity they did not desire. This scale was normed on heterosexual undergraduate females.

Development

The RCUSS was developed on the basis of past research suggesting women voluntarily give in to sexual activity, even though they may have little or no sexual desire or would rather not engage in sexual activity (Meston & Buss, 2007; O'Sullivan & Allgeier, 1998). For example, Zimmerman, Sprecher, Langer and Holloway (1995) found that when asked how sure they were that they could say "no" if a boyfriend was trying to talk them into having sex, only 61 percent of females reported that they could definitely say no to unwanted sex. In a diary study, O'Sullivan and Allgeier (1998) found that 50 percent of the undergraduate women sampled wrote that they had consented to unwanted sexual activity, ranging from kissing to sexual intercourse, during a 2-week period (O'Sullivan & Allgeier, 1998).

The items of the RCUSS were chosen on the basis of past literature, suggesting that women consent to unwanted

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sexual activity for a variety of reasons including to satisfy their partner's needs, promote intimacy, avoid tension, prevent a partner from losing interest in the relationship and/or fulfill perceived relationship obligations (Impett & Peplau, 2002; O'Sullivan & Allgeier, 1998; Shotland & Hunter, 1995). Items of the RCUSS reflect how characteristic it is for a woman to voluntarily consent to unwanted sexual activity for these reasons.

The RCUSS is an 18-item, self-report questionnaire. Factor analysis with varimax rotation revealed a unidimensional scale that included all 18 items (no factor loadings below .30), accounting for 59.2 percent of the variance.

Response Mode and Timing

Participants respond to the 18 items using a 9-point scale ranging from 0 (*not at all characteristic of me*) to 8 (*very characteristic of me*). The scale takes approximately 10 minutes to complete.

Scoring

There are no reverse-scored items. Scores are summed. Total scores can range from 0 to 144. The mean scores on this inventory for our female undergraduate samples were $M = 41.2$, $SD = 33.5$ ($N = 150$; Kennett et al., 2009); $M = 37.2$, $SD = 31.8$ ($N = 330$; Humphreys & Kennett, 2010); $M = 43.69$, $SD = 32.22$ ($N = 178$; Kennett et al., 2012); and $M = 46.31$, $SD = 36.63$ ($N = 246$; Kennett et al., 2013).

Reliability

Based on female undergraduate data sets, the reliability for the RCUSS was .96 ($N = 150$), with an average inter-item correlation of .75 (ranging from .46 to .85; Kennett et al., 2009) and .96 ($N = 152$), with an average inter-item correlation of .55 (ranging from .18 to .85; Humphreys & Kennett, 2010), respectively.

Over a 6-week period, test–retest reliability in a female student sample ($N = 63$) was .85 (Humphreys & Kennett, 2010).

Validity

Construct validity was examined by comparing the RCUSS to a number of relationship variables; a previously established scale, The Sexual Experiences Survey (SES; Koss & Oros, 1982); as well as two newly designed scales: Sexual Self-Efficacy, and Sexual Giving-in Experiences (Kennett et al., 2009).

The RCUSS is positively correlated with number of casual partners, $r(330) = .22$ (Humphreys & Kennett, 2010); number of steady partners, $r(330) = .23$ (Humphreys & Kennett, 2010); $r(150) = .22$ (Kennett et al., 2009); and number of sexual partners, $r(246) = .36$ (Kennett et al., 2013). The greater the number of relationship partners, the more likely a woman will be endorsing a greater number of reasons for consenting to unwanted sex. This makes intuitive sense given that more relationship experience will inevitably lead to discrepancies in sexual desires that need to be negotiated. Some are resolved through relationship maintenance behaviours, such as pleasing the partner. The RCUSS is also correlated positively with two individual questions asking about the *extent* to which women have experienced unwanted sexual advances from men, $r(330) = .18$ (Humphreys & Kennett, 2010); $r(150) = .24$ (Kennett et al., 2009); and the *percentage* of relationships in which women have experienced unwanted sexual advances, $r(330) = .18$ (Humphreys & Kennett, 2010); $r(150) = .44$ (Kennett et al., 2009). The RCUSS was also positively correlated with actual percentage of time women "gave-in" to sexual experiences, $r(330) = .63$ (Humphreys & Kennett, 2010); $r(150) = .63$ (Kennett et al., 2009); $r(178) = .53$ (Kennett et al., 2012); $r(246) = .57$ (Kennett et al., 2013). Therefore, the greater the amount of reported unwanted sexual advances from men, the greater the endorsement of various reasons for consenting to these behaviours were observed.

As predicted in the Humphreys and Kennett (2010) study, the RCUSS scale was also positively correlated with forced sex play (Koss & Oros, 1982; Items 1–3), $r(152) = .541$, $p < .001$, and attempted or completed forced intercourse (Koss & Oros, 1982; Items 4–10), $r(152) = .502$, $p < .001$, in the SES. We found that the greater the experience with nonconsensual sexual behaviour, at any level, the greater the endorsement of reasons for consenting to unwanted sexual activity, $r(150) = .49$ (Kennett et al., 2009). This could be due to the fact that women with higher levels of nonconsensual sex are involved in more ambiguously consensual situations in total or that many nonconsensual sexual situations are later justified as consensual but not desired.

The Sexual Self-Efficacy (Kennett et al., 2009) scale assesses women's belief that they have what it takes to deal with or prevent unwanted sexual advances. As expected, this five-item scale was negatively correlated with RCUSS, $r(330) = -.50$ (Humphreys & Kennett, 2010); $r(150) = -.46$ (Kennett et al., 2009); $r(178) = -.42$ (Kennett et al., 2012); $r(246) = -.56$ (Kennett et al., 2013). Clearly, believing that you have the ability to deal with unwanted sexual advances should lead to less need to endorse reasons for consenting to unwanted sexual activities.

Other Information

The RCUSS was adapted for an undergraduate male sample (Quinn-Nilas, Kennett, & Humphreys, 2013). Aspects of the data reported here for female samples were replicated in the Quinn-Nilas et al. (2013) study.

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Exhibit

Reasons for Consenting to Unwanted Sex Scale

When answering these questions, please think of all the times in which you have consented to unwanted sexual activity. Rate each statement as to how characteristic it is of you as your reasons for consenting to unwanted sexual activity using the scale provided.

	0 Not at all characteristic of me	1	2	3	4 Somewhat characteristic of me	5	6	7	8 Very characteristic of me
1. I felt that I would be jeopardizing our relationship if I did not engage in the unwanted sexual activity.	○	○	○	○	○	○	○	○	○
2. As his girlfriend, I am obligated to engage in the unwanted sexual activity.	○	○	○	○	○	○	○	○	○
3. He verbally pressured me to participate in the unwanted sexual behaviour.	○	○	○	○	○	○	○	○	○
4. He begged me to engage in the unwanted sexual activity until I could not argue anymore.	○	○	○	○	○	○	○	○	○
5. I had been drinking or had consumed other types of drugs.	○	○	○	○	○	○	○	○	○
6. I felt guilty for not participating in the unwanted sexual activity.	○	○	○	○	○	○	○	○	○
7. I feared that I would lose my boyfriend if I did not consent to the unwanted sexual activity.	○	○	○	○	○	○	○	○	○
8. I wanted to avoid tension in our relationship.	○	○	○	○	○	○	○	○	○
9. I wanted to prevent my partner from losing interest in our relationship.	○	○	○	○	○	○	○	○	○
10. I consented to the unwanted sexual activity to promote intimacy.	○	○	○	○	○	○	○	○	○
11. I felt it was necessary to satisfy my partner's needs.	○	○	○	○	○	○	○	○	○

12. I felt that I needed to because I consented to the sexual activity before.	○	○	○	○	○	○	○	○	○
13. I didn't want to hurt my partner's feelings.	○	○	○	○	○	○	○	○	○
14. He physically would not let me leave.	○	○	○	○	○	○	○	○	○
15. I didn't want him to feel rejected.	○	○	○	○	○	○	○	○	○
16. I felt that if I consented to the unwanted sexual activity, he would like/love me.	○	○	○	○	○	○	○	○	○
17. I wanted to feel accepted by my partner.	○	○	○	○	○	○	○	○	○
18. He sweet talked me into it.	○	○	○	○	○	○	○	○	○

The Internal and External Consent Scales

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Sexual consent has been conceptualized as both an internal state of willingness to engage in sexual activity as well as a verbal/behavioral act of agreement to engage in sexual activity (Muehlenhard, Humphreys, Jozkowski, & Peterson, 2016). The first conceptualization of consent implies that consent is an internal decision about one's willingness to engage in sexual activity whereas the latter conceptualization defines consent as an action (verbal, nonverbal, explicit, implicit) that denotes a person's willingness or agreement to engage in sexual activity (Jozkowski, Sanders, Peterson, Dennis, & Reece, 2014a; Muehlenhard, 1995/1996). The Internal and External Consent Scales represent quantitative measures aimed at assessing both conceptualizations of consent among college students. The Internal Consent Scale (ICS) assesses a range of feelings college students experience which contribute to their decision to consent to sex. The External Consent Scale (ECS) assesses the verbal/behavioral indicators used to communicate consent. Because of its contextual nature (Muehlenhard et al., 2016), both measures are event-level assessments of consent.

Development

The ICS and ECS were developed using a multi-phase, mixed methods approach consisting of a comprehensive literature review, an item-elicitation and content analysis, item development, review, and revision, and a quantitative assessment. The item-elicitation survey consisted of multiple open-ended questions aimed at eliciting responses from college students about internal and external consent (see Jozkowski, Peterson, Sanders, Dennis, & Reece, 2014b). Data were analyzed using an inductive coding approach; the themes generated were used to write quantitative closed-ended items for both measures.

The initial pool consisted of 78 items assessing internal consent and 67 items assessing external consent. These items were reviewed by a panel of content experts and revised based on their feedback. Redundant items were removed and additional items were added based on constructs that emerged from the literature review. After revision, 39 internal and 20 external consent items were administered to a sample of college students (N = 660) as part of a larger quantitative survey. Additional steps were taken, including factor analysis and examination of the scree plot, eigenvalues, and factor loadings, to further refine the measures and eliminate items (see Jozkowski et al., 2014a) resulting in a final set of 25 items for the ICS and 18 items for the ECS.

Each scale is composed of five factors which assess unique aspects of internal and external consent. The ICS factors include: *Physical Response*; *Safety/Comfort*; *Arousal*; *Agreement/Wantedness*; and *Readiness*. The ECS factors include: *Nonverbal Behaviors*; *Passive Behaviors*; *Communication/Initiator Behaviors*; *Borderline Pressure Behaviors*; and *No Response Signals*.

Although the two measures were initially developed to assess internal and external consent to vaginal–penile sex, they have been used to assess consent to other sexual behaviors including genital touching, oral sex, and anal sex, in addition to vaginal penile sex (e.g., Jozkowski & Wiersma, 2015; Marcantonio, Jozkowski, & Wiersma-Mosley, 2019; Satinsky & Jozkowski, 2014).

Response Mode and Timing

When completing both measures, participants are instructed to think back to the last time they engaged in sexual activity

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or vaginal penile sex. For the ICS, students are instructed to "Please indicate the extent to which you agree or disagree that you felt the following during the last time you engaged in sexual activity." The ICS items use a four-point Likert-type scale, with response options ranging from *strongly disagree* to *strongly agree*. A not applicable option is also given. If researchers use skip logic to remove participants who have never engaged in sexual activity, they should not include the "not applicable" response option.

For the ECS, instructions read: "Which of the following behaviors did you engage in to indicate your *consent* or *agreement* to engage in sexual activity?" Participants are instructed to select all applicable cues from the list provided. ECS items are assessed using dichotomized response choices as either: (1) yes, they engaged in the cue to communicate consent/agreement or (0) no they did not engage in that particular cue to communicate consent/agreement. When scored, participants receive "1" for each cue they reported using.

Participants typically complete the ICS and ECS in approximately five minutes or less.

Scoring

For the ICS, mean scores are calculated for each subscale. Each subscale represents a separate set of feelings associated with consent. Subscales are composed of the following items: *Physical Response*: 2, 8, 12, 17, 22, 24; *Safety/Comfort*: 4, 5, 15, 16, 20, 21, 23; *Arousal*: 1, 3, 6; *Agreement/ Wantedness*: 7, 10, 14, 19, 25; and *Readiness*: 9, 11, 13, 18.

The ICS subscales function, for the most part, as individual measures assessing each unique set of feelings associated with one's decision to consent to sex. For example, a person may feel highly aroused during their most recent sexual activity (resulting in higher scores on the arousal subscale), but perhaps not as ready (resulting in lower scores on the readiness subscale) due to conflicting feelings about their romantic interests in their potential sexual partner. This ICS allows researchers to assess these potential feelings of ambivalence.

Summed scores are used for each subscale on the ECS; higher scores indicate increased number of cues utilized to communicate consent. Subscales are composed of the following items: *Nonverbal behaviors*: 1, 6, 11, 17, 18; *Passive Behaviors*: 2, 7, 12, 16; *Communication/Initiator Behaviors*: 3, 8, 13; *Borderline Pressure*: 4, 9, 14; and *No Response Signals*: 5, 10, 15.

Similar to the ICS, each ECS subscale represents its own unique measure of external consent. As such, the subscales comprising each full scale are generally not used together as an intact scale because they assess unique aspects of internal and external consent. Participants may use multiple cues to communicate consent; the ECS allows researchers to assess a variety of cues college students may use.

Reliability and Validity

Internal and external consent are event-specific; contextual factors can and do influence the range of feelings people have associated with consent as well as the cues people use to communicate consent (Muehlenhard et al., 2016). As such, traditional assessments of reliability (e.g., test-rest) and validity (e.g., construct validity) do not make conceptual sense to test these measures. Cronbach's alpha was used to assess the internal consistency of the subscales for both measures. Alpha scores ranged from .90 to .94 for the ICS subscales and .67 to .81 for the ECS subscales (Jozkowski et al., 2014a; Jozkowski & Wiersma, 2015). Validity was assessed via the review of items by the expert panel as well as via comparing the items generated with previous research. The factors that emerged on the ECS were conceptually similar to the consent cues reported by Hickman and Muehlenhard (1999). Known-group validation was also used to assess the measure across gender. Findings suggested conceptual consistency with the traditional sexual script (Jozkowski et al., 2014a; Wiederman, 2005), lending support to the validity of the measures.

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Exhibit

The Internal Consent Scale

People may have different feelings associated with their *consent* or *willingness* to engage in sexual activity. Think back to the last time you engaged in *vaginal–penile intercourse* (or *sexual activity*). Please indicate the extent to which you agree or disagree that you felt the following during the last time you engaged in *vaginal–penile intercourse* (or *sexual activity*). If you have never engaged in vaginal–penile intercourse (or any sexual behavior), please select NA (Not Applicable).

	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
1. I felt interested.	○	○	○	○	○
2. I felt heated.	○	○	○	○	○
3. I felt aroused.	○	○	○	○	○
4. I felt secure.	○	○	○	○	○
5. I felt in control.	○	○	○	○	○
6. I felt turned on.	○	○	○	○	○
7. The sex felt consented to.	○	○	○	○	○
8. I felt rapid heart beat.	○	○	○	○	○
9. I felt ready.	○	○	○	○	○
10. The sex felt desired.	○	○	○	○	○
11. I felt sure.	○	○	○	○	○
12. I felt lustful.	○	○	○	○	○
13. I felt willing.	○	○	○	○	○
14. The sex felt agreed to.	○	○	○	○	○
15. I felt comfortable.	○	○	○	○	○
16. I felt safe.	○	○	○	○	○
17. I felt erect/vaginally lubricated.	○	○	○	○	○
18. I felt aware of my surroundings.	○	○	○	○	○
19. The sex felt wanted.	○	○	○	○	○
20. I felt certain.	○	○	○	○	○
21. I felt respected.	○	○	○	○	○
22. I felt flushed.	○	○	○	○	○
23. I felt protected.	○	○	○	○	○
24. I felt eager.	○	○	○	○	○
25. The sex felt consensual.	○	○	○	○	○

The External Consent Scale

People communicate their *willingness* or *consent* to engage in sexual activity in a variety of ways. Think about the last time you engaged in *vaginal–penile intercourse* (or sexual activity) with another person. Which of the following behaviors did you engage in to indicate your *consent* or *agreement* to engage in vaginal–penile sex (or sexual activity)? Indicate all responses that may apply. If you have never engaged in vaginal-penile intercourse (or sexual activity), please select the last option.

☐ 1. I used non-verbal cues such as body language, signals, or flirting.
☐ 2. I did not resist my partner's attempts for sexual activity.
☐ 3. I initiated sexual behavior and checked to see if it was reciprocated.
☐ 4. I took my partner somewhere private.
☐ 5. It just happened.
☐ 6. I increased physical contact between myself and my partner.
☐ 7. I did not say no or push my partner away.
☐ 8. I used verbal cues such as communicating my interest in sexual behavior or asking if he/she wanted to have sex with me.
☐ 9. I shut or closed the door.
☐ 10. I did not say anything.

- ☐ 11. I touched my partner, showed him/her what I wanted through touch or increasing physical contact between myself and the other person.
- ☐ 12. I let the sexual activity progress (to the point of intercourse).
- ☐ 13. I indirectly communicated/implied my interest in sex (e.g. talked about getting a condom).
- ☐ 14. I just kept moving forward in sexual behaviors/actions unless my partner stopped me.
- ☐ 15. I did not do anything; it was clear from my actions or from looking at me that I was willing to engage in sexual activity/sexual intercourse.
- ☐ 16. I reciprocated my partner's advances.
- ☐ 17. I removed mine or my partner's clothing.
- ☐ 18. I engaged in some level of sexual activity such as kissing or "foreplay."
- ☐ 19. I have **never** engaged in vaginal-penile intercourse (sexual activity)

Rape Supportive Attitude Scale

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The purpose of the Rape Supportive Attitude Scale is to measure attitudes that are hostile to rape victims, including false beliefs about rape and rapists. Seven beliefs measured by this scale are (a) women enjoy sexual violence, (b) women are responsible for rape prevention, (c) sex rather than power is the primary motivation for rape, (d) rape happens only to certain kinds of women, (e) a woman is less desirable after she has been raped, (f) women falsely report many rape claims, and (g) rape is justified in some situations. Researchers (Burt, 1980; Marolla & Scully, 1982; Russell, 1975; Williams & Holmes, 1981) have found support for the views that these beliefs not only promote rape but also hinder and prolong the recuperative process for survivors of a rape.

Development

The Rape Supportive Attitude Scale (RSAS) was developed from a pool of 40 items from the rape attitude measures of Barnett and Felid (1977), Burt (1980), Koss (1981), and Wheeler and Utigard (1984). The 20 items selected for the scale meet two criteria: (a) the items have content validity (i.e., they assess one of the seven victim-callous beliefs listed above), and (b) the items have high item-total scale correlations and high factor loadings on the same factor.

The RSAS was administered to two college student samples in the northeastern United States (Lottes, 1991). For both samples, the 20 scale items were randomly distributed as part of a larger questionnaire. The first sample consisted of 98 males and 148 females from two universities. The second sample consisted of 195 males and 195 females from three universities. A principal components analysis of the data from both samples supported a single factor, accounting for 37 percent of the variance in each case. In both analyses, all items loaded on this factor at .39 or greater. The RSAS is appropriate to administer to adults.

Response Mode and Timing

The response options for each item are one of the five Likert-type scale choices: 1 (*strongly disagree*), 2 (*disagree*), 3 (*undecided*), 4 (*agree*), or 5 (*strongly agree*).

The scale takes about 10 minutes to complete.

Scoring

All of the items are scored in the same direction and items can be randomly placed among Likert-type items assessing other characteristics. Items are summed to produce an overall score. The higher the score, the more rape supportive or victim-callous attitudes are supported by a respondent.

Reliability

For the first sample of 246 college students, the Cronbach's alpha was .91. For the second sample of 390 students, the Cronbach's alpha also was .91. Other research using a Spanish translated version of the scale

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in Peruvian samples reported Cronbach's alphas of .88 (Sierra, Monge, Santos-Iglesias, Paz Bermúdez, & Salinas, 2011), .72 (Moyano, Monge, & Sierra, 2017), and .88 (Sierra, Gutiérrez-Quintanilla, Bermúdez, & Buela-Casal, 2009).

Bell et al. (1992) found that a 12-item subset (containing Items 2, 3, 4, 5, 6, 7, 11, 12, 13, 15, 17, and 19) of the RSAS produced an alpha of .77 for a sample of 521 first-year university students, and subsequently, test–retest reliability of $r = .53$ (Bell, Lottes, & Kuriloff, 1995).

Validity

For both college student samples ($N = 246$ and $N = 390$, respectively), scores for the RSAS were significantly correlated ($p < .001$) in the predicted direction with (a) nonegalitarian gender role beliefs ($r = .58$; $r = .64$), (b) traditional attitudes toward female sexuality ($r = .50$; $r = .42$), (c) adversarial sexual beliefs ($r = .65$; $r = .70$), (d) arousal to sexual violence ($r = .32$; $r = .37$), and (e) nonacceptance of homosexuality ($r = .25$; $r = .34$; Lottes, 1991). For males in both samples, the RSAS was significantly correlated ($p < .001$) in the predicted direction with hypermasculinity (Mosher & Sirkin, 1984; $r = .44$; $r = .52$). Finally, for both samples, males indicated more victim-callous attitudes than females.

Construct validity of the shortened RSAS (Bell et al. 1992) was supported by significant correlations in the predicted directions between this scale and measures of feminist attitudes, male dominant attitudes, liberalism, and social conscience for both the first-year student and senior samples (Bell et al., 1992, 1995). For both samples, men reported significantly higher scores on the RSAS than did women ($p < .001$; Bell et al., 1992, 1995). In addition, scores on the scale have been associated with emotional empathy ($r = -.39$) in a sample of college men in the U.S. (Dietzel, 2008). In samples of Peruvian adults, the RSAS was significantly correlated with endorsement of the sexual double standard (Moyano et al., 2017), and with aggressive sexual behavior (Sierra et al., 2009).

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Exhibit

Rape Supportive Attitude Scale

Write all your responses on the computer answer sheet. To indicate your opinion about each statement, shade in the number corresponding to one of the five circles. Indicate whether you strongly disagree (1), disagree (2), are undecided or have no opinion (3), agree (4), or strongly agree (5). Remember: Be sure that the statement you are reading corresponds to the statement number you are marking on the answer sheet. Mark only one response for each statement.

	1 Strongly Disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly Agree
1. Being roughed up is sexually stimulating to many women.	○	○	○	○	○
2. A man has some justification in forcing a female to have sex with him when she led him to believe she would go to bed with him.	○	○	○	○	○
3. The degree of a woman's resistance should be the major factor in determining if a rape has occurred.	○	○	○	○	○
4. The reason most rapists commit rape is for sex.	○	○	○	○	○
5. If a girl engages in necking or petting and she lets things get out of hand, it is her fault if her partner forces sex on her.	○	○	○	○	○
6. Many women falsely report that they have been raped because they are pregnant and want to protect their reputation.	○	○	○	○	○
7. A man has some justification in forcing a woman to have sex with him if she allowed herself to be picked up.	○	○	○	○	○
8. Sometimes the only way a man can get a cold woman turned on is to use force.	○	○	○	○	○
9. A charge of rape two days after the act has occurred is probably not rape.	○	○	○	○	○
10. A raped woman is a less desirable woman.	○	○	○	○	○
11. A man is somewhat justified in forcing a woman to have sex with him if he has had sex with her in the past.	○	○	○	○	○
12. In order to protect the male, it should be difficult to prove that a rape has occurred.	○	○	○	○	○
13. Many times a woman will pretend she doesn't want to have intercourse because she doesn't want to seem loose, but she's really hoping the man will force her.	○	○	○	○	○
14. A woman who is stuck-up and thinks she is too good to talk to guys deserves to be taught a lesson.	○	○	○	○	○
15. One reason that women falsely report rape is that they frequently have a need to call attention to themselves.	○	○	○	○	○
16. In a majority of rapes the victim is promiscuous or had a bad reputation.	○	○	○	○	○
17. Many women have an unconscious wish to be raped, and may then unconsciously set up a situation in which they are likely to be attacked.	○	○	○	○	○
18. Rape is the expression of an uncontrollable desire for sex.	○	○	○	○	○
19. A man is somewhat justified in forcing a woman to have sex with him if they have dated for a long time.	○	○	○	○	○
20. Rape of a woman by a man she knows can be defined as a "woman who changed her mind afterwards."	○	○	○	○	○

The Sexual Deception Scale

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The Sexual Deception Scale (SDS) is designed to measure the use of sexual deception in intimate relationships, specifically focusing on the lies and deceptive practices individuals use to engage in sexual activity with a current or prospective partner. The scale is designed for use with general or college populations for research on intimate and close relationships.

Development

In accordance with Social Exchange Theory (Thibaut & Kelley, 1959), the scale addresses the use of sexually deceptive practices in order to gain and/or maintain specific resources. In some cases, the rewards are sexual in nature (e.g., when one partner deliberately lies in order to have sexual intercourse with another partner). Likewise, the use of deception may occur when an individual uses sexual intimacy as a cost in order to maintain an existing resource (e.g., providing sexual services in order to maintain the relationship).

The instrument consists of a 15-item questionnaire in a forced choice dichotomous format, evaluated through both exploratory and confirmatory factor analysis (Marelich, Lundquist, Painter, & Mechanic, 2008). Participants indicate "yes" or "no" to having ever engaged in a particular act or behavior. The measure consists of three subscales which reflect the different types of lies or deceptions used by individuals: blatant lies, self-serving lies, and lies told to avoid confrontation. Items that address blatant lying tactics involve the individual's use of deception to gain access to sexual activity. The use of deception for self-serving purposes employs the practice of engaging in sexual behavior in order to gain specific resources such as material items or companionship. Finally, items that address the use of deception to avoid confrontation signify the individual's willingness to engage in sexual behaviors to avoid conflict.

A confirmatory factor analysis was performed to validate the principal components analysis. Based on these results, the final set of 15 items was derived, along with their respective subscales. This final model showed good fit, and a second-order factor analysis showed that the three subscales reflect a broader sexual deception construct.

Response Mode and Timing

Respondents answer "yes" or "no" to each item based on whether they have ever participated in the act/behavior. The instrument can be administered by traditional paper and pencil method or by utilizing online data collection techniques. The measure takes 5 minutes to complete.

Scoring

The SDS is composed of three subscales (*Blatant Lying, Self-Serving, Avoiding Confrontation*). A total score is also viable as suggested through a second-order factor analysis (Marelich et al., 2008). The *Blatant Lying* subscale consists of Items 1, 2, 9, 11, 12, 13, and 15. The *Self-Serving* subscale consists of Items 4, 7 and 8. The *Avoiding Confrontation* subscale consists of Items 3, 5, 6, 10, and 14. A total score assessing overall Sexual Deception consists of all 15 items. Each item is assigned the value of 1 for a "*Yes*" response, and 0 for a "*No*" response. To obtain a total score for the subscales, sum the items of the particular subscale, then divide by the number of items in the subscale. For the total score, sum all the items, then divide by 15 (the total number of items). Scores yielded for each subscale indicate the amount of deception used; higher scores signify the greater use of sexually deceptive practices.

Reliability

Principal components analysis was utilized, and an oblique rotation was applied to allow the resulting components to correlate. Items showed good pattern matrix loadings on at least one of the subscales. After a confirmatory factor analysis was performed (see "Validity" below), internal consistency reliabilities were generated, and ranged from .71 to .75 for the three subscales (Marelich et al., 2008). In applications of the scale, reliabilities for the measures range from .65 to .69 (Brewer & Abell, 2015). Test–retest reliabilities are not available.

Validity

Construct and criterion validity of the instrument were assessed by correlating the three subscales with additional

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items designed to address attitude and behavioral issues toward sexual intimacy and sexual needs (Marelich et al., 2008). Across all three subscales, those noting more sexual deceptions reported a greater number of lifetime sexual partners, engaging in one-night stands, and misrepresenting the total number of lifetime sexual partners to the current/prospective partners. These correlations were the strongest for those using blatant lies. Individuals showing greater self-serving deceptions were significantly associated with greater perceived sexual need and greater need to manipulate their partners. Items assessing intimacy-related attitudes, such as the desire to be in a relationship and/or maintain the current relationship, were found to positively correlate with the use of deceptions to avoid confrontation.

In addition to the significant associations found between subscales and various acts and behaviors, each component was found to fall in accordance with the cost/benefit structure of social exchange. For example, items that comprise the *Blatant Lying* subscale address the use of deception to gain sexual favors (i.e., sex as a benefit), whereas items associated with the *Self-Serving* or *Avoiding Confrontation* subscales construe the use of sexual favors as a means to gain or maintain resources (i.e., sex as a cost to maintain the relationship).

Brewer and Abell (2015) showed higher scores on all three subscales associated with greater levels of Machiavellianism, using sex as a means of goal attainment (e.g., resources), sex as a means of reducing insecurity (e.g., pursing sex for a self-esteem boost), and greater intent toward infidelity. Also, higher levels of lying for self-serving purposes and to avoid partner confrontation were associated with pursuing sex for greater emotional connection.

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Exhibit

Sexual Deception Scale

Below are a number of items addressing things you may or may not have done sometime in your life. Please answer each item Yes or No. "Sex" below can refer to intercourse or other forms of sexual intimacy (e.g. oral sex, manual stimulation).

Have you ever …

	Yes	No
1. Told someone "I love you" but really didn't just to have sex with them?	○	○
2. Told someone "I care for you" just to have sex with them?	○	○
3. Had sex with someone so they would leave you alone?	○	○
4. Had sex with someone so you would have someone to sleep next to?	○	○
5. Had sex with someone even though you didn't want to?	○	○
6. Had sex with someone in order to maintain your relationship with them?	○	○
7. Had sex with someone in order to maintain resources you get from them (e.g., money, clothes, companionship)?	○	○
8. Had sex with someone in order to get resources from them (e.g., money, clothes, companionship)?	○	○
9. Had sex with someone just so you could tell your friends about it?	○	○
10. Had sex with someone so they wouldn't break up with you?	○	○
11. Gotten a partner really drunk or stoned in order to have sex with them?	○	○
12. Told someone they'd be your boyfriend/girlfriend just so they would have sex with you	○	○
13. Had sex with someone, then never returned their calls after that?	○	○
14. Had sex with someone because you wanted to please them?	○	○
15. Faked "who you are" in order to have sex with somebody?	○	○

Peer Sexual Harassment Victimization Scale

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The purpose of this scale is to assess incidents of peer sexual harassment victimization among youth and to distinguish between same-gender and cross-gender harassment. Additionally, this scale identifies victims' reactions to peer sexual harassment victimization.

This scale does not ask victims to report their perceptions of sexual harassment. Instead, it asks whether specific behaviors have occurred and how upset participants were by the behaviors. Participants are asked to report how often they were victims of each behavior, perpetrated by their peers, during the past school year. For each behavior that is endorsed, participants are asked a series of follow-up questions, including how upset they were by the harassment, the gender of the perpetrator, and their reactions to the harassment. This scale was administered to a sample of 9th graders, but would be appropriate for other high school students and undergraduates as well. This scale has been used in the following publications: Lindberg, Grabe, and Hyde (2007); Petersen and Hyde (2009); and Petersen and Hyde (2013).

Development

The original Peer Sexual Harassment Victimization Scale consisted of 15 different sexual behaviors that could be considered sexually harassing. Fourteen of these behaviors were taken from the American Association of University Women (AAUW) study on peer sexual harassment (1993, 2001). The fifteenth behavior, "called you a slut or a whore," was added based on pilot interviews designed to discover sexually harassing behaviors that could be perpetrated by girls toward female victims.

In 2012 the AAUW added questions about sexual harassment online (Hill & Kearn, 2012). Respondents were asked if anyone ever used text, e-mail, Facebook, or other electronic means to (a) send unwelcome sexual comments, jokes, or pictures or have someone post them about you; (b) spread unwelcome sexual rumors about you; or (c) call you gay or lesbian in a negative way.

Response Mode and Timing

Although this scale may be administered as a paper-and-pencil questionnaire, we recommend the use of computer-assisted interviewing. This response mode may provide follow-up questions only when sexually harassing behaviors are endorsed, to avoid the confusion of skipping questions that are not applicable. Computer-assisted interviews also increase respondents' feelings of anonymity, thereby increasing accurate reporting. This scale is completed in approximately 15 minutes.

Scoring

Frequency of harassment is scored on a 0 (*never*) to 3 (*several times*) scale. Frequency of all behaviors may be summed to obtain a frequency of harassment scale. Upset ratings for each behavior are scored from 0 (*not upset*) to 2 (*very upset*). Upset ratings for all behaviors may be summed to create a total upset score. Frequency of harassing behaviors may be multiplied by total upset score to obtain a weighted score of harassing events that caused distress.

Gender of the perpetrator may be compared to gender of the victim to assess same-gender and cross-gender sexual harassment. The responses "a girl" and "a group of girls" should be combined, and the responses "a boy" and "a group of boys" should be combined. Participants who responded "a group of boys and girls" may be analyzed separately or set to missing, if these responses are infrequent. Once these responses are combined, researchers may compare responses to respondent's gender to assess same-gender and cross-gender harassment. First, harassment perpetrated by girl(s) is scored as 0 and harassment perpetrated by boy(s) is scored as 1 for each behavior. These variables should be multiplied by frequencies of each corresponding behavior to create frequency of cross-gender harassment for female respondents and frequency of same-gender harassment for male respondents. Second, gender of the perpetrator should be rescored as 0 for harassment perpetrated by boy(s) and 1 for harassment perpetrated by girl(s) for each behavior. These variables should again be multiplied by frequency of each corresponding behavior to create frequency of same-gender harassment for female respondents and frequency of cross-gender harassment for male respondents. Frequencies of same-gender and cross-gender harassment for each behavior may be summed for both male and female respondents to create the measure's total frequency of same-gender and cross-gender harassment. Each reaction to harassment is coded as 0 (*not experienced*) and 1 (*experienced*) for each behavior.

Since sexual harassment is defined as "unwanted" some researchers might prefer a measure of sexually harassing

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behaviors that were rated as upsetting. Frequency of upsetting sexual harassment can be scored by summing only the behaviors that were rated by participants as "somewhat upsetting" or "very upsetting" (Petersen & Hyde, 2013).

Reliability

Cronbach's alpha for harassing behaviors = .87. Test–retest reliability for the behaviors was assessed by the AAUW (1993, 2001) with a correlation of .95.

Validity

Detailed information about construct validity and scale formation is reported by the AAUW (1993, 2001) and Hill & Kearn (2012).

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Exhibit

Peer Sexual Harassment Victimization Scale

Gender

○ Male
○ Female

Below are some things that sometimes happen to kids at school. In the *past school year* how often did kids do these things to you? Circle your response.

1. Made sexual comments, jokes, gestures, or looks.

   ○ Never
   ○ Once
   ○ A Few Times
   ○ Several Times

1a. If more than "Never," how upset were you by this?

   ○ Not at all Upset
   ○ Somewhat Upset
   ○ Very Upset

1b. The main time this happened, who did it to you?

   ○ A Girl
   ○ A Boy
   ○ Group of Girls
   ○ Group of Boys
   ○ Group of Boys and Girls

1c. How did this make you feel? (check all that apply)

   ☐ Self-conscious
   ☐ Embarrassed
   ☐ Afraid/scared
   ☐ Less sure of yourself/ less confident
   ☐ Confused about who you are
   ☐ Doubt whether you have what takes to graduate
   ☐ Doubt whether you have what it takes to continue after graduation

- ☐ Doubt whether you can have a happy relationship
- ☐ Angry
- ☐ Powerless
- ☐ Flattered
- ☐ Normal
- ☐ Guilty/ashamed
- ☐ Dirty

2. Showed, gave, or left you sexual pictures, photographs, illustrations, messages, or notes.

   - ○ Never
   - ○ Once
   - ○ A Few Times
   - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

3. Spread sexual rumors about you

   - ○ Never
   - ○ Once
   - ○ A Few Times
   - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

4. Said you were gay or lesbian in a negative way

   - ○ Never
   - ○ Once
   - ○ A Few Times
   - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

5. Flashed or "mooned" you.

   - ○ Never
   - ○ Once
   - ○ A Few Times
   - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

6. Touched, grabbed, or pinched you in a sexual way.

   - ○ Never
   - ○ Once
   - ○ A Few Times
   - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

7. Intentionally brushed up against you in a sexual way.

   - ○ Never
   - ○ Once
   - ○ A Few Times
   - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

8. Pulled off or down your clothing.

   - ○ Never
   - ○ Once

- ○ A Few Times
- ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

9. Forced you to kiss him or her.

   - ○ Never
   - ○ Once
   - ○ A Few Times
   - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

10. Forced you to do something sexual other than kissing.

    - ○ Never
    - ○ Once
    - ○ A Few Times
    - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

11. Called you a slut or whore.

    - ○ Never
    - ○ Once
    - ○ A Few Times
    - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

12. Stared at a sexual part of your body.

    - ○ Never
    - ○ Once
    - ○ A Few Times
    - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

13. Said something bad would happen to you if you did not engage in sexual relations.

    - ○ Never
    - ○ Once
    - ○ A Few Times
    - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

14. Pulled at your clothing in a sexual way.

    - ○ Never
    - ○ Once
    - ○ A Few Times
    - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

15. Blocked your way or cornered you in a sexual way.

    - ○ Never
    - ○ Once
    - ○ A Few Times
    - ○ Several Times

[Author note: If more than never repeat follow-up questions 1a, 1b, and 1c]

The Sexual Strategies Scale

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Sexual aggression—including sex obtained through verbal coercion, intoxication, and physical force—is highly prevalent and frequently results in negative physical and mental health outcomes for victims. Identifying perpetrators of sexual aggression is essential to understanding risk factors for perpetration and to developing and evaluating primary prevention. Although substantial research has been conducted to evaluate and improve the psychometric properties of sexual *victimization* measures, far less attention has been devoted to developing psychometrically-sound sexual *perpetration* measures.

The Sexual Strategies Scale (SSS; Strang, Peterson, Hill, & Heiman, 2013) includes 22 items assessing use of aggressive strategies to obtain sex (defined as oral, anal, or vaginal intercourse) after the other person has refused. Categories of sexual aggression measured by the scale include enticement, verbal coercion, use of older age or authority, use of alcohol or drugs, and use of physical threats or force.

Development

The SSS is a revision of the Post-Refusal Sexual Persistence Scale (PRSPS) developed by Struckman-Johnson, Struckman-Johnson, and Anderson (2003). The PRSPS was a 19-item measure designed to assess a range of sexually coercive and aggressive behavior instigated by both men and women. Items were selected based on a review of the literature. To create and validate the SSS, the PRSPS instructions and items were reworded slightly, three additional items were added, the response mode was simplified, and psychometric data were collected.

Response Mode and Timing

The SSS was specifically designed to be brief (approximately 5 minutes) and easy to read (Flesch-Kincaid Reading Grade Level = 4). Participants simply check a box for any strategy that they have ever used to obtain sex.

Scoring

The SSS allows for classification of respondents as having engaged in or not engaged in four categories of aggressive sexual strategies (i.e., items within each category are added and values greater than 0 are set equal to 1). Endorsement of Items 1, 12, and/or 13 is consistent with use of *enticement*. Endorsement of Items 2, 5, 6, 10, 15, 16, 20, and/or 21 is consistent with *verbal coercion*. Endorsement of Items 3 and/or 17 is consistent with use of *older age or authority*. Endorsement of Items 4, 9, and/or 22 is consistent with use of *intoxication*, and endorsement of Items 7, 8, 11, 14, 18, and/or 19 is consistent with use of *physical threats or force*.

Notably, sex obtained through intoxication or through physical threats or force is illegal in most states; however, the SSS was not explicitly designed to correspond to legal definitions of sexual assault, and some of the intoxication items in particular may not reach the level of criminal sexual behavior (Strang & Peterson, 2016). Although the items measuring enticement may not seem severe enough to qualify as "sexual aggression," individuals who endorse enticement items are more likely than those that do not to also endorse more severe forms of sexual aggression (Peterson et al., 2018; Testa, Hoffman, Lucke, & Pagnan, 2015). Thus, enticement strategies fall on the very low end of a sexual aggression severity continuum.

To date, the SSS has typically been scored dichotomously, such that participants are classified has having ever or never engaged in each category of aggressive sexual behavior. However, based on a Rasch item analysis (Testa et al., 2015), the SSS does reflect a meaningful continuum of aggressive behavior, suggesting that a summed total score could serve as a sufficient representation of a latent severity dimension.

Reliability

Because the SSS is a behavioral sampling measure and is not clearly based on a latent measurement model (see Koss et al., 2007), calculations of internal consistency reliability may not be appropriate. An induced measurement model may be more appropriate for the SSS, such that the items are seen to represent categories of behaviors rather than a single underlying construct—consistent with the dichotomous scoring that has been used in the past. Nevertheless, Testa et al. (2015) provided evidence of a latent severity dimension, and reported that the SSS items demonstrated adequate internal consistency ($\alpha = .79$).

Validity

In research to date, the SSS has demonstrated strong evidence of validity. For example, based on a Rasch item analysis, Testa et al. (2015) found that the SSS conformed well to a unidimensional continuum of perpetration severity—demonstrating good global fit with no ill-fitting items.

Evidence of convergent validity is provided by findings demonstrating that men who endorse sexually aggressive

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behavior on the SSS score higher on expected correlates of sexual aggression—including a history of child sexual abuse and engagement in other risky sexual behavior—than men who do not endorse sexual aggression on the SSS (Peterson et al., 2018). Further, Peterson, Janssen, Goodrich, and Heiman (2014) used the SSS to classify men as sexually aggressive or non-aggressive and found expected differences in physiological responding between the two groups, providing evidence of convergent validity beyond self-report correlates.

The SSS has demonstrated only weak associations with measures of socially desirable responding (Strang et al., 2013), providing some evidence of divergent validity. Additionally, in three separate studies with men (Strang et al., 2013; Testa et al., 2015), scores on the SSS were correlated with scores on other measures of sexual aggression history (providing evidence of convergent validity); however, despite the significant relationship between the measures, men endorsed significantly *higher* rates of sexual aggression on the SSS as compared to the other measures. Given that sexual aggression is socially undesirable, higher rates of reporting are encouraging evidence that the SSS may be less influenced by socially desirable responding than the other measures. Strang and Peterson (2016) explicitly evaluated socially desirable responding on the SSS using a Bogus Pipeline (BPL) or fake lie-detector procedure. Men were randomly assigned to complete the SSS in a BPL condition—in which they were led to believe that the honesty of their responses was being monitored—or in a Standard Testing condition. There were no significant differences in rates of reported sexual aggression on the SSS in the BPL versus the Standard Testing condition, and effect sizes were small to moderate, suggesting that responses on the SSS are not highly influenced by social desirability bias.

Finally, Strang and Peterson (2017) had men complete the SSS and then participate in follow-up interviews to assess for instances of false positive and false negative responses. False positives and false negatives on the SSS were relatively rare, suggesting that the measure has adequate sensitivity and specificity.

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Exhibit

The Sexual Strategies Scale

In the past, which—if any—of the following strategies have you used to convince someone to have sex (oral, anal, or vaginal intercourse) after they initially said "no"? (check all that apply)

- ☐ 1. Continuing to touch and kiss them in the hopes that they will give in to sex.
- ☐ 2. Telling them lies (e.g., saying "I love you" when you don't).
- ☐ 3. Using your older age to convince them.
- ☐ 4. Getting them drunk/high in order to convince them to have sex.
- ☐ 5. Threatening to tell others a secret or lie about them if they don't have sex.
- ☐ 6. Asking them repeatedly to have sex.
- ☐ 7. Blocking them if they try to leave the room.
- ☐ 8. Threatening to harm them physically if they don't have sex.
- ☐ 9. Taking advantage of the fact that they are drunk/high.
- ☐ 10. Threatening to harm yourself if they don't have sex.
- ☐ 11. Using a weapon to frighten them into having sex.
- ☐ 12. Taking off their clothes in the hopes that they will give in to sex.

☐ 13. Taking off your clothes in the hopes that they will give in to sex.
☐ 14. Using physical restraint.
☐ 15. Threatening to break up with them if they don't have sex.
☐ 16. Questioning their sexuality (e.g., calling them gay/a lesbian).
☐ 17. Using your authority to convince them (e.g., if you were their boss, supervisor, camp counselor, etc.).
☐ 18. Harming them physically.
☐ 19. Tying them up.
☐ 20. Questioning their commitment to the relationship (e.g., saying "if you loved me, you would").
☐ 21. Accusing them of "leading you on" or being "a tease."
☐ 22. Slipping them drugs (e.g., GHB or "Roofies") so that you can take advantage of them.
☐ 23. I have never used ANY of the above strategies.

Post-Refusal Sexual Persistence Scale

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The purpose of the Post-Refusal Sexual Persistence Scale (PRSPS) is to assess women's and men's experiences of receiving and perpetrating sexually persistent behavior following a refusal. The authors reason that all acts of post-refusal sexual persistence (PRSP) are sexually coercive because the receivers have indicated their non-consent. The PRSPS is a 38-item scale that measures whether an individual has (1) ever been subjected to and (2) ever perpetrated 19 tactics to achieve sexual contact after initial contact has been refused.

Development

The first version of the PRSPS was used by Struckman-Johnson, Struckman-Johnson, and Anderson (2003) to ask 275 men and 381 women from two college campuses about their experiences with PRSP with the other gender. Struckman-Johnson et al. (2003) created the 19-item sexual tactics list with 13 tactics derived from 26 strategies developed by Anderson and Aymami (1993) for a study of how women initiate sex with men. Anderson and Newton (2004) went on to publish a variation of these initiation strategies as the 19-item Sexually Assertive Behavior Scale (SABS). Because the SABS authors reported that many of their items originated from Koss and Oros's (1982) Sexual Experiences Survey (SES), the PRSPS is thus related to the original SES. The final six tactics of the PRSPS were drawn from the literature on male and female victims of sexual assault.

Response Mode and Timing

Participants are instructed "Since the age of 16, how many times has someone used any of the tactics on the list below to have sexual contact (genital touching, oral sex, or intercourse) with you after you have indicated 'no' to their advance?" In Part 2, participants are asked how many times they have used a tactic with someone who has refused their initial advance. Participants are instructed to write in the number of times it has happened and to answer "0" or zero if it has never happened. The tactics list has four categories that reflect increasing levels of sexual exploitation. Items 1–3 are for sexual arousal, Items 4–11 are for emotional or non-physical coercion, Items 12–13 are for intoxication, and Items 14–19 are for physical force.

The PRSPS can be completed on a computer or using paper-and-pencil in 10 minutes or less.

Scoring

The scale can be scored by calculating the means of the numbers (from 0 upward) participants assign to the 19

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tactics. Mean scores tend to be low as some of these behaviors, especially physical force, occur infrequently.

Another method is to calculate the percentage of participants who have never had an experience with a tactic (zero reported) and those who have had at least one experience with a tactic (1 or more reported). One can then calculate the percentage of participants who have experienced each of the tactics, the four levels of PRSP, or at least one tactic overall. For example, in their study of college students, Struckman-Johnson et al. (2003) determined that 58 percent of men and 78 percent of women had been subjected to one or more of the 19 tactics by another-gender person. In comparison, 43 percent of men and 26 percent of women had perpetrated at least one tactic.

Reliability

In the Struckman-Johnson et al. (2003) study with a college-aged sample, the Cronbach's alpha for the total 19-tactic set was .77 for victimization and .89 for perpetration. Smeaton et al. (2018) found a Cronbach's alpha of .79 for the PRSPS perpetration version given to a Mechanical Turk sample of 499 adults (mean age = 32). In a follow-up study, Anderson, Struckman-Johnson, and Smeaton (2017) reported a Cronbach's alpha of .83 for the PRSPS perpetration version given to a Mechanical Turk sample of 1,691 adults (mean age = 32). Using the four perpetration subscales of the PRSPS in a study of British college students, Blinkhorn, Lyons, and Almond (2015) reported Cronbach's alphas of .76 for arousal, .79 for emotional coercion, .82 for intoxication, and .91 for physical force.

Validity

Struckman-Johnson et al. (2003) established construct validity of the PRSPS in part by asking participants to write a description of their most recent experience with PRSP. Written validation of incidents was provided by 82 percent of 456 receivers and 80 percent of 219 perpetrators.

Adding to construct validity, Katz and Tirone (2008) discovered that 173 women with a history of childhood sexual abuse, as compared to women without this history, were more compliant with PRSPS tactics used by current male romantic partners. In a study of 187 British university students, Khan, Brewer, Kim, and Munoz Centifanti (2017) documented that traits related to primary psychopathology and borderline personality were associated with perpetration scores on the PRSPS in both men and women. Similarly, Blinkhorn et al. (2015) reported relationships between narcissistic traits and perpetration scores on the PRSPS among 329 British/American university students. Buday and Peterson (2015) compared the convergent validity of the perpetration version of the PRSPS with the revised SES-Long Form Perpetration instrument (Koss et al., 2007). They found that reports of sexual aggression were higher on the PRSPS than the SES-LFP and that men were more consistent than women in reporting across the two measures.

Summary

The PRSPS has been described as unique in that both men and women are asked about their experiences as victims and perpetrators of sexual aggression (Buday & Peterson, 2015). The PRSPS is flexible in that it can assess victimization, perpetration, or both. The scale can be modified to assess PRSP between persons of other-gender, same-gender, any gender, or gender not stated (as shown in the example scale). We recommend using additional items to assess victim and perpetrator gender, relationship, sexual outcome, and information about the most recent incident of PRSP. Smeaton et al. (2018) is an example of an on-line version of the PRSPS that measures only perpetration experiences and includes items for the most recent incident.

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Exhibit

Post-Refusal Sexual Persistence Scale

Sexual Tactics List I

Since the age of 16, *how many times* has someone used any of the *tactics* on the list below to have *sexual contact* (genital touching, oral sex, or intercourse) with you after you have indicated "*no*" to their sexual advance? In the space provided, write in the *number of times*, to the best of your memory, that someone has used a tactic against you. If someone has *never* used this tactic with you, fill in a *zero* (0) in the space. Please do not leave any space blank.

1. They continued to kiss and touch you to arouse you. _____
2. They removed their clothing to arouse you. _____
3. They removed some of your clothing to arouse you. _____
4. They tried to talk you into it by repeatedly asking. _____
5. They told you a lie of some kind (e.g., how much they liked or loved you). _____
6. They questioned your sexuality (e.g., they said you were impotent/frigid or gay/lesbian). _____
7. They threatened to break up with you. _____
8. They told you they would blackmail you. _____
9. They threatened to harm themselves. _____
10. They used their authority or position (e.g., boss, babysitter, teacher). _____
11. They were an adult at least 5 years older than you and you were under age 16. _____
12. They took advantage of the fact that you were already drunk or high. _____
13. They purposefully gave you alcohol or drugs to get you high. _____
14. They blocked your retreat (e.g., closed, locked, or stood blocking the door). _____
15. They used physical restraint to hold you down or sit on you. _____
16. They tied you up. _____
17. They threatened to physically harm you. _____
18. They physically harmed you (e.g., hit, slapped, or bit). _____
19. They threatened you with a weapon. _____

Sexual Tactics List II

Since the age of 16, *how many times* have you used any of the tactics on the list below to have *sexual contact* (genital touching, oral sex, or intercourse) with someone after they indicated "*no*" to your sexual advance? In the space provided, write in the *number of times*, to the best of your memory, that you have used any of the tactics on the list. If you have *never* used a tactic, fill in a *zero* (0) in the space. Please do not leave any space blank.

20. You continued to kiss and touch them to arouse them. _____
21. You removed your clothing to arouse them. _____
22. You removed some of their clothing to arouse them. _____
23. You tried to talk them into it by repeatedly asking. _____
24. You told them a lie of some kind (e.g., how much you liked or loved them). _____
25. You questioned their sexuality (e.g., you said they were impotent/frigid or gay/lesbian). _____
26. You threatened to break up with them. _____
27. You told them you would blackmail them. _____

28. You threatened to harm yourself. _____
29. You used your authority or position (e.g., boss, babysitter, teacher). _____
30. You were an adult at least 5 years older than them and they were under age 16. _____
31. You took advantage of the fact that they were already drunk or high. _____
32. You purposefully gave them alcohol or drugs to get them high. _____
33. You blocked their retreat (e.g., closed, locked, or stood blocking the door). _____
34. You used physical restraint to hold them down or sit on them. _____
35. You tied them up. _____
36. You threatened to physically harm them. _____
37. You physically harmed them (e.g., hit, slapped, or bit). _____
38. You threatened them with a weapon. _____

9 Communication

Dyadic Sexual Communication Scale

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The Dyadic Sexual Communication Scale (DSC) is a Likert-type scale assessing respondents' perceptions of the communication process encompassing sexual relationships. The original 13-item scale discriminated people reporting sexual problems from those not reporting sexual problems (Catania, 1986). The shortened and modified versions of the DSC scales, which have been used in nationally sampled sexual-risk studies, discriminated significant differences in disclosure of extramarital sex (Choi, Catania, & Dolcini, 1994) and have also been correlated with prevalence of multiple partners (Dolcini, Coates, Catania, Kegeles, & Hauck, 1995). Scale items evolved from qualitative in-depth interviews with individuals and couples.

Response Mode and Timing

The DSC scale is a 13-item scale that measures how respondents perceive the discussion of sexual matters with their partners. Items are rated on a 6-point Likert-type scale ranging from 1 (*Disagree Strongly*) to 6 (*Agree Strongly*). For each item respondents are instructed to choose the rating that most adequately describes their feelings. All forms of the DSC scale are interviewer administered. When brief evaluations are desired, shortened, modified versions of the DSC scale are available to assess respondents' communication quality. Scales are available in English and Spanish, and all versions of the DSC scale take 1–2 minutes to complete.

Scoring

Sum across items for a total score.

Reliability

The DSC scale has been administered to college and adolescent populations, as well as national urban probability samples constructed to adequately represent White, Black, and Hispanic ethnic groups, as well as high HIV-risk groups (Choi et al., 1994; Dolcini et al., 1995). The DSC scale was assessed in a pilot study (N = 144 college students) that examined the internal consistency, test–retest reliability, and factor structure of the scale (Cronbach's alpha = .81 total sample, .83 cohabiting couples; test–retest = .89; a single factor was obtained; Catania, Pollack, McDermott, Qualls, & Cole, 1990). In a larger study (N = 500), the scale was administered to respondents who had been recruited from pleasure parties in the California Bay Area (82%), and at church meetings and college classes in Colorado (18%) (Cronbach's alpha = .87), and factor analysis revealed that the DSC scale was composed of a single dimension.

A shortened, four-item version of the DCS scale was examined in a study of the correlates of extramarital sex (Choi et al., 1994). The analysis was a part of the 1990–1991 National AIDS Behavior Survey (NABS) longitudinal study, which was composed of three interlaced samples designed to oversample African-Americans and Hispanics for adequate representation (see Catania, Coates, Kegeles et al., 1992). The interlaced samples included a national sample, an urban sample of 23 cities with high prevalence of AIDS cases, and a special Hispanic urban sample. To examine the correlates of extramarital sex, we restricted our analysis to married, 18–49-year-olds who reported having a primary sex partner. In Choi et al. (1994), the shortened, four-item version of the DSC scale was administered to those respondents (N = 5,900) who were married and between the ages of 18 and 49. Reliability was good (Cronbach's alpha = .62 for the total sample). Means, standard deviations, range, median, and reliabilities are given for White, Black, and Hispanic groups, males and females, and levels of education for both national and urban/high risk city samples in Table 1. In the national sample, significant differences in test scores were found between education levels and gender. In the urban/ high-risk city groups, differences were found between ethnic groups as well as levels of education and gender.

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A six-item version of the DSC scale was developed on 114 adolescent females who participated in a study that examined psychosocial correlates of condom use and multiple partner sex (Catania, Coates, & Kegeles, 1989). Respondents, recruited from a family planning clinic in California, were White (92%), Hispanic (4%), and other (4%). The majority of respondents were heterosexual, unmarried, and sexually active. Reliability was good (Cronbach's alpha = .77).

The six-item DSC scale was also administered to 558 respondents who participated in a study (Dolcini et al., 1995) examining incidence of multiple partners and related psychosocial correlates, as part of the AIDS in Multi-Ethnic Neighborhoods (AMEN) Study (Catania, Coates, Stall et al., 1992). The AMEN study is a longitudinal study (three waves) examining the distribution of HIV, sexually transmitted diseases (STDs), related risk behaviors, and their correlates across social strata. Respondents for the AMEN study were recruited from 16 census tracts of San Francisco that are characterized by high rates of STDs and drug use (see Catania, Coates, Stall et al., 1992; Fullilove et al., 1992). The multiple-partner study sample, which obtained data at Wave 2, was restricted to heterosexuals who reported having a primary sexual partner and being sexually active. Respondents ranged from 20–44 years of age. Reliability was good (Cronbach's alpha = .67). The mean, standard deviation, median, range, and reliabilities of ethnic groups, gender, and levels of education are provided in Table 1.

TABLE 1
Normative Data for the Dyadic Sexual Communications Scale

	N	*M*	*SD*	*Range*	*Mdn*	*Alpha*
			NABS*[a] *Study			
National sample	1,217	13.35	2.21	11.0	14.0	.65
High-risk cities	4,683	13.14	2.26	12.0	13.0	.62
Ethnicity						
White						
National sample	843	13.48	2.14	11.0	14.0	.67
High-risk cities	1,816	13.20	2.22	12.0	13.0	.68
Black						
National sample	213	13.25	2.38	9.0	14.0	.64
High-risk cities	1,797	13.53	2.22	12.0	14.0	.58
Hispanic						
National sample	128	12.57	2.31	8.0	12.0	.53
High-risk cities	3,062	12.45	2.39	12.0	12.0	.59
Gender						
Male						
National sample	499	13.22	2.22	9.0	13.0	.65
High-risk cities	2,059	12.98	2.25	11.0	13.0	.62
Female						
National sample	723	13.48	2.17	11.0	14.0	.65
High-risk cities	2,617	13.32	2.24	12.0	14.0	.62
Education						
< 12 years						
National sample	125	13.46	2.37	9.0	14.0	.60
High-risk cities	694	12.39	2.31	11.0	12.0	.54
= 12 years						
National sample	330	13.09	2.23	11.0	13.0	.62
High-risk cities	1,163	13.20	2.30	12.0	13.0	.56
> 12 years						
National sample	765	13.46	2.13	11.0	14.0	.67
High-risk cities	2,286	13.32	2.18	12.0	14.0	.66
			AMEN*[b] *Study			
Total	558	20.73	2.97	14.0	21.0	.67
Ethnicity						
White	259	20.49	2.94	12.0	21.0	.73
Black	124	21.48	2.60	10.0	22.5	.53
Hispanic	124	20.59	3.35	14.0	21.5	.66
Gender						
Male	250	20.44	2.97	12.0	21.0	.67
Female	308	20.96	2.96	14.0	21.0	.66
Education						
< 12 years	58	20.45	3.44	14.0	21.0	.61
= 12 years	109	20.95	2.95	12.0	21.0	.66
> 12 years	390	20.71	2.91	14.0	15.0	.70

aNational AIDS Behavior Survey
bAIDS in Multi-Ethnic Neighborhoods

Validity

In the sample of respondents who had been recruited from pleasure parties in the California Bay Area and at church meetings and college classes in Colorado, the measure discriminated people reporting sexual problems from those not reporting sexual problems, with the problem group ($M = 53$, $SD = 13.0$) reporting poorer sexual communication than the no problem group ($M = 63.7$, $SD = 10.2$), $t(416) = 9.32$, $p = .0001$). In Choi et al. (1994), a regression analysis revealed that Hispanic participants who scored poorly on the dyadic communication scale were more likely to report extramarital sex. In Dolcini et al. (1995), the communication scale was relevant only to those with a primary partner. A multiple regression revealed the DSC scale to be associated with having two or more partners. Recent studies also provide supporting validity data with regards to sexual and mental health outcomes (Pazmany et al., 2015; Rancourt et al., 2016).

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Exhibit

Dyadic Sexual Communication Scale

Instructions: Now I am going to read a list of statements different people have made about discussing sex with their primary partner. As I read each one, please tell me how much you agree or disagree with it.

	1 Disagree Strongly	2	3	4	5	6 Agree Strongly
1. My partner rarely responds when I want to talk about our sex life.	○	○	○	○	○	○
2. Some sexual matters are too upsetting to discuss with my sexual partner.	○	○	○	○	○	○
3. There are sexual issues or problems in our sexual relationship that we have never discussed.	○	○	○	○	○	○
4. My partner and I never seem to resolve our disagreements about sexual matters.	○	○	○	○	○	○
5. Whenever my partner and I talk about sex, I feel like she or he is lecturing me.	○	○	○	○	○	○
6. My partner often complains that I am not very clear about what I want sexually.	○	○	○	○	○	○
7. My partner and I have never had a heart to heart talk about our sex life together.	○	○	○	○	○	○
8. My partner has no difficulty in talking to me about his or her sexual feelings and desires.	○	○	○	○	○	○
9. Even when angry with me, my partner is able to appreciate my views on sexuality.	○	○	○	○	○	○
10. Talking about sex is a satisfying experience for both of us.	○	○	○	○	○	○
11. My partner and I can usually talk calmly about our sex life.	○	○	○	○	○	○
12. I have little difficulty in telling my partner what I do or don't do sexually.	○	○	○	○	○	○
13. I seldom feel embarrassed when talking about the details of our sex life with my partner.	○	○	○	○	○	○

Health Protective Sexual Communication Scale

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The Health Protective Sexual Communication Scale (HPSC) is a self-report scale that assesses how often respondents discuss health protective topics while interacting with a new, first-time sexual partner. Items address health protective concerns related to safer sex, sexual histories, and contraceptive use. Moreover, the scale assesses communication that has health protective consequences as distinct from sexual communication that may be related to enhancement of sexual pleasure. Findings indicate both the brief and expanded HPSC scales to be strongly linked to high-risk sexual behaviors that include multiple partners, condom use, and alcohol use before sex (Catania, 1995; Catania, Coates, & Kegeles, 1994; Dolcini, Coates, Catania, Kegeles, & Hauck, 1995).

Development

The expanded 10-item scale was based on an extension of two brief scales that have been used in two national survey studies to assess the ability to discuss sexual histories and condom use with prospective sexual partners.

Response Mode and Timing

The scales are available in Spanish and English. The original self- or interviewer-administered scale is composed of three items rated on a 3-point scale: 1 (*happened with all partners*), 2 (*happened with some partners*), and 3 (*didn't happen*). The revised, expanded scale is a 10-item Likert-type rating scale with two questions (Items 9 and 10) that need to be excluded when administering the scale to gay and lesbian individuals. Each item is rated on a 4-point scale ranging from 1 *(never)* to 4 (*always*).

Both the short and the expanded forms are self- or interviewer-administered and take approximately 1–2 minutes to complete.

Scoring

Total scores on the brief three-item HPSC scale are produced by reverse scoring and summing across Items 1, 2, and 4 for a total scale score. Total scores on the expanded HPSC scale are obtained by summing across items.

Reliability

The HPSC scale has been administered to varied populations, including adolescents and national urban probability samples constructed to adequately represent White, Black, and Hispanic ethnic groups, as well as high HIV-risk groups (Catania, Coates, Golden et al., 1994; Catania, Kegeles, & Coates, 1990; Dolcini et al., 1995). The original brief version of the HPSC scale was used on a population of 114 adolescent females who participated in a study (Catania et al., 1990) that examined psychosocial correlates of condom use and multiple partner sex. Respondents, recruited from a family planning clinic in California, were White (92%), Hispanic (4%), and other (4%) and ranged in age from 12 to18 years. The majority of respondents were heterosexual, unmarried, and sexually active. Reliability was good (Cronbach's alpha = .67).

The original three-item Health Communication Sexual Scale was also administered to respondents who participated in a study (Catania, Coates, & Kegeles, 1994) examining the incidence of multiple partners and related psychosocial correlates, as part of the AIDS in Multi-Ethnic Neighborhoods (AMEN) study (See Catania, Coates, Kegeles et al., 1992). The AMEN study is a longitudinal study (three waves) examining the distribution of HIV, sexually transmitted diseases (STDs), related risk behaviors, and their correlates across social strata. The multiple partner study sample, which used data generated from Wave 2, restricted inclusion criteria to unmarried heterosexuals who revealed an HIV-related risk marker at Wave 2, and being sexually active between Wave 1 and 2. Respondents ranged from 20–44 years of age. Reliability was excellent (Cronbach's alpha = .84). The mean, standard deviation, median, range, and reliabilities of ethnic groups, gender, and levels of education are provided in Table 1.

In another AMEN cohort analysis, the original HPSC scale was examined in relationship to incidence of multiple partners (Dolcini et al., 1995). Reliability was fair (Cronbach's alpha = .50)

Based on analyses of the Health Communication Scale Measure used in the 1990–1991 National AIDS Behavior Survey (NABS) longitudinal study (Wave 2), which was composed of three interlaced samples designed to oversample African Americans and Hispanics for adequate representation, internal reliability was excellent (Cronbach's alpha = .85) (see Catania, Coates, Stall et al., 1992).

Validity

A hierarchical multiple regression model using the original brief version of the HPSC scale, in which several

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TABLE 1
Normative Data for the Health Protective Sexual Communication Scale

	n	*M*	*SD*	Range	*Mdn*	Alpha
NABS[a] *study*						
National sample	155	23.82	8.21	30.0	24.0	.88
High-risk cities	810	22.93	7.32	30.0	22.0	.84
Ethnicity						
White						
National sample	101	23.06	8.19	30.0	22.3	.88
High-risk cities	342	22.53	7.02	30.0	21.9	.83
Black						
National sample	47	25.62	8.13	29.0	28.0	.87
High-risk cities	329	24.35	7.33	30.0	24.0	.83
Hispanic						
National sample	8	23.01	3.30	15.0	24.0	.60
High-risk cities	125	21.90	8.12	30.0	21.0	.87
Gender						
Male						
National sample	81	22.57	8.22	29.0	22.1	.90
High-risk cities	414	21.22	6.72	29.0	20.0	.64
Female						
National sample	68	25.88	7.85	30.0	27.2	.84
High-risk cities	379	25.30	7.46	30.0	25.0	.82
Education						
< 12 years						
National sample	14	22.24	6.01	17.0	24.0	.76
High-risk cities	97	24.78	7.89	30.0	24.0	.55
= 12 years						
National sample	49	23.67	8.50	29.0	22.9	.88
High-risk cities	196	22.36	7.53	30.0	22.0	.85
> 12 years						
National sample	91	24.53	8.48	30.0	25.0	.88
High-risk cities	517	22.74	7.02	30.0	22.0	.83
The AMEN[b] *Study*						
Total	320	22.82	7.81	30.0	22.0	.84
Ethnicity						
White	146	23.05	7.86	30.0	22.1	.86
Black	72	23.69	7.79	30.0	23.0	.83
Hispanic	85	21.57	7.65	30.0	20.0	.84
Gender						
Male	155	20.64	7.34	30.0	19.0	.84
Female	165	24.86	7.71	30.0	24.0	.83
Education						
< 12 years	41	20.32	7.30	24.0	21.0	.83
= 12 years	65	23.34	8.34	30.0	22.0	.87
> 12 years	212	23.11	7.72	30.0	22.0	.84

aNational AIDS Behavior Survey
bAIDS in Multi-Ethnic Neighborhoods

predictor variables known to be related to sexual risk were examined, revealed that a greater willingness to request partners to use condoms as indicated by HPSC scores was associated with more frequent condom use and multiple partners (Catania et al., 1990). The HPSC has evidenced cross-cultural validity (Puljic & Begovac, 2013; Devieux et al., 2016; Roja-Guyler et al., 2005).

In earlier analysis with the HPSC scale, we examined whether its relationship to condom use was continuous across all scale values (Catania et al., Coates, Kegeles et al., 1992). The scale was found to have a significant relationship to condom use primarily for those respondents scoring in the upper one third of the scale, indicating that people who consistently communicate about sexual matters across sexual encounters and partners are significantly more likely to use condoms. Thus, the HPSC scale was scored by dichotomizing the measure so that high scores included the upper one third of scores and low scores were composed of the lower two thirds of scores. Findings from the AMEN study revealed that high levels of health protective sexual communication were significantly correlated with high levels of condom use.

In another AMEN cohort analysis, the original HPSC scale was examined in relationship to incidence of multiple partners (Dolcini et al., 1995). for respondents who also reported two or more sex partners in the past year. A regression model for all respondents with a primary sexual partner revealed that those who also had a new sexual partner in the past year (n = 201), and low heath protective communication (odds ratio = 1.3 per unit decrease in health protective communication, 95 percent confidence interval = 1.05, 1.5), were associated with having multiple partners.

We conducted further analyses on the expanded Health Communication Scale Measure used in the 1990–1991 National AIDS Behavior Survey (NABS) longitudinal study (Wave 2). The interlaced samples included a national sample, an urban sample of 23 cities with high prevalences of AIDS cases, and a special Hispanic urban sample. In our analyses of the expanded HPSC scale, we limited our sample to respondents who reported having at least one partner in the past 12 months, were heterosexual (defined as respondents who only had opposite gender sexual partners in the past 5 years), aged 18–49, and completed the HSPC scale. Respondents who described themselves as Asians, Native Americans, and Pacific Islanders were excluded because they were not adequately represented for analysis purposes (n = 24). Because the intent of our analyses was to examine relationships between variables, sample segments were combined without the use of poststratification weights. The resulting increase in power allowed for the detection of even very small relationships. Means, standard deviations, range, median, and reliability are given for White, Black, and Hispanic ethnic groups; males and females; and levels of education (Table 1).

A factor analysis of the expanded HPSC scale obtained a single large eigenvalue (4.3), with an additional value falling near one (1.15), suggesting that there may be an additional factor, but it is not a strong element in the expanded scale. The second factor that may exist consists of items asking specifically about condom use. Given the small amount of

variance accounted for by the second (6%) versus the first factor (37%), we opted for a single-factor scale. We recommend further work that would expand the number of condom items in the scale to examine additional factors.

We examined an array of psychosocial and experiential factors that previous models and studies have indicated are important determinants of sexual communication and negotiation. From a multiple regression in which we analyzed primary antecedents, background, and demographic variables, we found respondents with higher HPSC expanded scale scores to be more likely to have greater sexual and condom relations skills, to be sexually assertive, to have ever used a condom, to be committed to using condoms in the future, to have been tested for HIV, and to be 18 to 29 years old (Catania, 1995). Respondents with high HPSC scores were also less likely to feel susceptible to STDs and less likely to report having used alcohol before sex.

We also examined a number of hypothesized gender and race interactions. An inverse relationship between sexual guilt and HPSC among Hispanic women was revealed. In contrast, Hispanic men who scored higher on sexual guilt also scored higher in HPSC. Higher communicators were also somewhat more likely to be Black than Hispanic and were almost three times more likely to be women than men.

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Exhibit

Health Protective Sexual Communication Scale

Now I am going to read a list of things that people talk about before they have sex with each other for the first time. How often in the past 12 mos. have you … (read each)? Would you say always, almost always, sometimes, or never?

	1 Never	2 Sometimes	3 Almost always	4 Always	Don't Know	Decline to Answer
1. Asked a new sex partner how (he/she) felt about using condoms before you had intercourse.	○	○	○	○	○	○
2. Asked a new sex partner about the number of past sex partners (he/she) had.	○	○	○	○	○	○
3. Told a new sex partner about the number of sex partners you have had.	○	○	○	○	○	○
4. Told a new sex partner that you won't have sex unless a condom is used.	○	○	○	○	○	○
5. Discussed with a new sex partner the need for both of you to get tested for the AIDS virus before having sex.	○	○	○	○	○	○
6. Talked with a new sex partner about not having sex until you have known each other longer.	○	○	○	○	○	○
7. Asked a new sex partner if (he/she) has ever had some type of VD, like herpes, clap, syphilis, gonorrhea.	○	○	○	○	○	○

8. Asked a new sex partner if (he/she) ever shot drugs like heroin, cocaine, or speed.	○	○	○	○	○	○
9. Talked about whether you or a new sex partner ever had homosexual experiences.	○	○	○	○	○	○
10. Talked to a new sex partner about birth control before having sex for the first time.	○	○	○	○	○	○

Sexual Self-Disclosure Scale

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The Sexual Self-Disclosure Scale (SSDS) is a 19-item, Likert-type scale measuring disclosure-flexibility and the degree of threat associated with sexuality questions. The scale items assess respondent's self-reported ease or difficulty with disclosing information in different contexts and interpersonal situations. The self-administered scale requires respondents to imagine themselves in the different situations described by each item and then rate how easy or difficult it would be to reveal sexual information under each circumstance. A short 7-item form is also available, as are interviewer-administered and English and Spanish versions of the scale.

Development

Response Mode and Timing

Ratings on the 19-item measure are made on 6-point Likert-type scales, in which 1 (*extremely easy*) to 6 (*extremely difficult*). Response choices for the 7-item measure are: 1 (*very easy*), 2 (*kind of easy)*, 3 (*kind of hard*), and 4 (*very hard*). *Decline to answer* and *don't know* options are also given. All forms take approximately 3–5 minutes to complete.

Scoring

Scores are produced by summing across items. Lower scores indicate less threat.

Reliability

The SSDS has been administered to college students and a national probability sample. The scale was administered to participants recruited from introductory social science classes at a large western university (N = 66 males, 127 females) who were asked to participate in a study assessing response bias in self-administered questionnaires and sample bias in face-to-face interviews (Catania, McDermott, & Pollack, 1986). Respondents' mean age was 24.6 years; education, 12–19 years; 100 percent Caucasian heterosexuals; 89 percent with prior coital experience; 65 respondents having had coitus with their current partner. Internal consistency reliability (Cronbach's alpha) was .93; test–retest r was .92.

The shortened version was administered by phone to 2,018 respondents who were randomly selected, through probability sampling using random-digit dialing of the contiguous United States, to participate in the 1995 National Survey Methods study (unpublished data, information is available from the author); reliability (Cronbach's alpha) = .80. Normative data are provided for gender and levels of education; ethnic groups were excluded because there was an insufficient number of non-White ethnic groups to pursue differences (see Table 1).

Validity

In terms of construct validity, the scale was also found to correlate significantly with Chelune's (1976) General Self-Disclosure Scale, $r(72)= -.51$, $p < .0001$. Note that lower

TABLE 1
Normative Data for Sexual Self-Disclosure Scale/National Methods Survey Study

	N	*M*	*SD*	Range	*Mdn*	Alpha
National sample	2,018	21.68	.09	21.0	22.00	.80
Male—national sample	953	21.82	4.24	21.0	22.00	.82
Female—national sample	1,065	21.54	4.17	20.0	22.00	.81
Education						
< 12—national sample	144	21.35	4.62	21.0	21.65	.83
= 12—high risk cities	642	21.65	4.34	21.0	22.00	.81
> 12—national sample	1,215	21.80	3.96	20.0	22.00	.80

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SSDS scores indicate less threat, whereas higher scores on Chelune's (1976) scale indicate less threat. One item from the Scale by Chelune (1976) concerning sexuality was removed to eliminate redundancy between scales.

The discriminant validity of the SSDS was assessed in a separate analysis in which introductory psychology students ($N = 90$) were compared with students in a human sexuality course ($N = 84$). We hypothesized that the human sexuality students, on the basis of self-selection for a course of that nature, would be more sexually self-disclosing than the average introductory psychology student. This hypothesis was supported: Intro Psych $M = 60.7$, $SD = 16.2$; Sex Course $M = 54.6$, $SD = 17.1$; $t(172) = 1.66$, $p < .05$. Note that groups did not differ in age, $t(172) = 1.14$, $p > .10$; number of sex books read, $t(172) = .30$, $p > .10$; number of lifetime sexual partners, $t(172) = .09$, $p > .10$; virginity status, $\chi^2(1, N = 174) = .01$, $p > .10$; and sex composition, $\chi^2(1, N = 174) = .01$, $p > .10$. Both the number of sexuality books read and total sex partners had small but significant negative correlations with threat, $r(86) = -.24$, $p < .03$; $r(86) = .23$, $p < .05$, respectively. There was no difference in number of partial responders; 24 percent of participants who circled one or more items were detected when comparing respondents who did versus did not receive the SSDS at baseline, $\chi^2(1, N = 193) = .06$, $p > .10$. This finding indicates that the SSDS did not sensitize respondents to making fewer nonresponses. Volunteers, relative to non-volunteers, were significantly less threatened about disclosing sexual information, $t(191) = 7.22$, $p < .0001$. Furthermore, the order of presentation of SSDS or general self-disclosure scales had no significant effects on sexual behavior and pathology summary scores. Summary scores included variety (the total number of different sexual behaviors performed), frequency (total frequency of sexual behaviors performed, and pathology (average percentage of sexual episodes negatively influenced by sexual problems). All t values were less than 1.49, and all two-tailed p values were greater than .14.

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Exhibit

Sexual Self-Disclosure Scale

The following describe different situations in which people may or may not wish to discuss sexual matters. Imagine yourself in each of the situations listed below and select the response which best shows how easy or difficult it would be for you to reveal sexual information in that situation. Use the key below as a guide for making your answer.

1. If you were asked to complete an anonymous questionnaire containing personal questions on sexuality, the answers to which you had been told would never be publicly associated with you personally, how easy or difficult would this be in the following situations:

	1 Extremely Easy	2 Moderately Easy	3 Somewhat Easy	4 Somewhat Difficult	5 Moderately Difficult	6 Extremely Difficult
a. In the privacy of your own home, with no one else present.	○	○	○	○	○	○
b. During a large (25 or more people) group meeting, where most others are also filling-out the questionnaire.	○	○	○	○	○	○

2. If you were asked personal sexual questions in a private face-to-face situation (for instance, only you and an interviewer), the answers to which you had been told would never be revealed, how much difficulty or ease would you have in doing this in the following situations:

	1 Extremely Easy	2 Moderately Easy	3 Somewhat Easy	4 Somewhat Difficult	5 Moderately Difficult	6 Extremely Difficult
a. With a young (20–30 years) female interviewer.	○	○	○	○	○	○
b. With a young (20–30 years) male interviewer.	○	○	○	○	○	○

c. With an older (50 years and older) female interviewer.	○	○	○	○	○	○
d. With an older (50 years and older) male interviewer.	○	○	○	○	○	○
e. With a young (25–35 years) female medical doctor.	○	○	○	○	○	○
f. With a young (25–35 years) male medical doctor.	○	○	○	○	○	○
g. With an older (50+ years) female medical doctor.	○	○	○	○	○	○
h. With an older (50+ years) male medical doctor.	○	○	○	○	○	○

3. How easy or difficult would it be for you to openly discuss your sex life and history in a group of three to five people who are:

	1 Extremely Easy	2 Moderately Easy	3 Somewhat Easy	4 Somewhat Difficult	5 Moderately Difficult	6 Extremely Difficult
a. With a close female friend.	○	○	○	○	○	○
b. With a close male friend.	○	○	○	○	○	○
c. With a spouse or sexual partner.	○	○	○	○	○	○
d. With a personal physician.	○	○	○	○	○	○
e. With a specialist in sexual problems.	○	○	○	○	○	○

4. How easy or difficult would it be for you to discuss a personal sexual problem or difficulty in the following situation (assume you are in private circumstances)?

	1 Extremely Easy	2 Moderately Easy	3 Somewhat Easy	4 Somewhat Difficult	5 Moderately Difficult	6 Extremely Difficult
a. Both female and male (mixed company) that you have known only briefly.	○	○	○	○	○	○
b. All members of your own sex that you have known only briefly.	○	○	○	○	○	○

5. How easy or difficult would it be for you to discuss a personal sexual problem or difficulty with your parents, or if your parents are deceased how easy or difficult would it have been to discuss such with them? (answer for both parents separately below):

	1 Extremely Easy	2 Moderately Easy	3 Somewhat Easy	4 Somewhat Difficult	5 Moderately Difficult	6 Extremely Difficult
a. With your mother.	○	○	○	○	○	○
b. With your father.	○	○	○	○	○	○

Short Form

1. Do you think that talking about sex in an AIDS survey is …

   ○ Very easy
   ○ Kind of easy
   ○ Kind of hard
   ○ Very hard

- O Decline to answer
- O Don't know

2. How easy or hard would it be to fill out an anonymous questionnaire that asked questions about your sexual behavior in the privacy of your own home with no one else present? Would it be…

   - O Very easy
   - O Kind of easy
   - O Kind of hard
   - O Very hard
   - O Decline to answer
   - O Don't know

3. How easy or hard would it be for you to fill out an anonymous questionnaire that asked questions about your sexual behavior in the waiting room of a medical clinic with other patients present, who could not see what you were writing? Would it be …

   - O Very easy
   - O Kind of easy
   - O Kind of hard
   - O Very hard
   - O Decline to answer
   - O Don't know

4. How easy or hard would it be for you to answer questions about your sexual behavior if they were asked by a medical doctor in the privacy of his/her own office? Would it be …

   - O Very easy
   - O Kind of easy
   - O Kind of hard
   - O Very hard
   - O Decline to answer
   - O Don't know

5. How easy or hard would it be to answer questions about your sexual behavior if they were asked by a marriage counselor in the privacy of his/her office? Would it be …

   - O Very easy
   - O Kind of easy
   - O Kind of hard
   - O Very hard
   - O Decline to answer
   - O Don't know

6. How easy would it be for you to discuss a sexual problem with a good friend? Would it be …

   - O Very easy
   - O Kind of easy
   - O Kind of hard
   - O Very hard
   - O Decline to answer
   - O Don't know

7. How easy would it be for you to discuss a sexual problem with a spouse or sexual partner? Would it be…

   - O Very easy
   - O Kind of easy
   - O Kind of hard
   - O Very hard
   - O Decline to answer
   - O Don't know

The Weighted Topics Measure of Family Sexual Communication

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The Weighted Topics Measure of Family Sexual Communication (WTM) was developed to enable researchers to assess quickly and objectively the amount of communication about sexuality that has occurred between parents and their adolescent children. This scale combines a relatively objective measure (number of topics discussed) with a more subjective one (extent of discussion).

Development

This measure was developed for research on parent–child communication. The first study for which the scale was used was by Fisher (1986a). Previous research (Fisher, 1986b) had revealed the topics most likely to have been discussed by early adolescents and their parents. These topics were used to develop a weighted scale that was appropriate for adolescents of various ages along with their parents.

Response Mode and Timing

The WTM asks respondents to indicate the extent to which nine specific sexual topics have been discussed, using a scale of 0–4, with 0 corresponding to *none* and 4 corresponding to *a lot*. Possible scores range from 0 to 36, with higher scores indicating greater amounts of communication. Adolescents may be asked to give separate reports for communication with the mother and the father. This measure takes no more than 2–3 minutes to complete.

Scoring

To score the WTM, simply add up the weights for each topic.

Reliability

In a study of 129 male and 234 female unmarried college students between the ages of 18 and 24 (Fisher, 1993), the Cronbach's alpha reliability coefficient was .89 for males reporting on communication with mothers, .91 for males reporting on communication with fathers, .90 for females reporting on communication with mothers, and .91 for females reporting on communication with fathers. Among the 336 mothers, the Cronbach alpha coefficient was .87, and for the 233 fathers it was .89. More recently, in a study of college students aged 18–21 (Clawson & Reese-Weber, 2003), the overall reliability coefficient was .91 for communication with fathers and .88 for communication with mothers.

Charest, Kleinplatz, and Lund (2016) modified the WTM, adding some topics and using more updated terms, obtaining a Cronbach's alpha of .89 for their young adult sample with diverse backgrounds and sexual orientations.

Validity

In a validity study (Fisher, 1993) of nine measures of sexual communication used with 129 male and 234 female college students between the ages of 18 and 25, the WTM was significantly correlated with general family communication as measured by the Openness in Family Communication subscale of Olson and Barnes' Parent–Adolescent Communication Scale (Olson et al., 1982). Correlation coefficients ranged from a low of .28 based on fathers' reports of communication to a high of .53 based on sons' reports of communication with their mothers. The WTM was not significantly correlated with a measure of social desirability responding (Strahan & Gerbasi, 1972). The correlation between the various measures of sexual communication and the validity measures were generally nonsignificant after Bonferroni corrections to account for the very large number of correlation coefficients that were calculated. In general, however, for most analyses, the WTM appeared to be the strongest of the measures that were examined.

Zamboni and Silver (2009) compared the WTM with Warren and Neer's Family Sex Communication Quotient (FSCQ; Warren & Neer, 1986). The WTM for communication with mothers was highly correlated (.64) with the comfort subscale of the FSCQ. For WTM reports of communication with fathers, the correlation with the comfort subscale of the FSCQ was .40 for females and .44 for

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males. Correlations of the WTM with the Value subscale of the FSCQ ranged from .22 to .46. Zamboni and Silver (2009) provided support for the concurrent validity of both the WTM and the FSCQ and concluded that "Because of these conceptual strengths and because the instruments have good psychometric properties, future studies might consider using these instruments to assess family sex communication" (p. 71).

Previous studies with the WTM have consistently indicated that when families are categorized as "high communication" and "low communication" families by means of a median split using this measure, adolescents and parents in the high communication families have sexual attitudes that are much more strongly correlated than those in the low communication families (Fisher, 1986a, 1987, 1988). The WTM was also used to determine predictors of parental communication about sexuality (Fisher, 1990).

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Exhibit

Weighted Topics Measure of Family Sexual Communication

Using a scale from 1 to 4 with 0 = None and 4 = A Lot, please indicate how much discussion you have had with your child about the following topics:

	0 None	1	2	3	4 A Lot
1. Pregnancy	○	○	○	○	○
2. Fertilization	○	○	○	○	○
3. Intercourse	○	○	○	○	○
4. Menstruation	○	○	○	○	○
5. Sexually Transmitted Disease	○	○	○	○	○
6. Birth Control	○	○	○	○	○
7. Abortion	○	○	○	○	○
8. Prostitution	○	○	○	○	○
9. Homosexuality	○	○	○	○	○

Sexual Self-Disclosure Scale

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Although there has been considerable research about self-disclosure, there has been less research regarding disclosure of sexual topics. In particular, researchers have often not differentiated disclosure about specific sexual topics. This differentiation is important because sexuality covers a wide range of attitudinal and behavioral areas. As such, we aimed to construct a scale consisting of sexual topics and to determine the extent of disclosure for each.

The question of whether subjects vary in their disclosure to different target persons has been examined extensively. For example, when disclosing information on sexual topics, adolescents and young adults prefer to disclose to friends and dating partners than to parents (Herold, 1984). Thus, the second aim was to assess self-disclosure separately for each of the target groups of mother, father, close friend of the same sex, and dating partner.

Development

The Sexual Self-Disclosure Scale (SSDS) was based on Jourard's Self-Disclosure Questionnaire (Jourard, 1971). The SSDS differs from Jourard's questionnaire (1971) in three respects: the SSDS measures only sexual topics, measures disclosure to various target groups (mother, father, close friend of the same sex, and dating partner), and does not measure self-disclosure to a close friend of the opposite sex as some people might have difficulty in distinguishing between a close friend of the opposite sex and a dating partner.

Response Mode and Timing

Participants are asked to indicate the degree to which they have talked about each of the eight topics with the target person on a scale ranging from 1 (*Have told the person nothing about this aspect of me*) to 4 (*Have talked in complete detail about this item to the other person. He or she knows me fully in this respect*). The scale requires about five minutes for completion.

Scoring

Self-disclosure scores are obtained separately for each of the target groups. Item scores for each target group are summed and mean scores are obtained.

Reliability

In a sample of 203 unmarried university women aged 18–22 (Herold & Way, 1988), the respective scale means and Cronbach alpha coefficients were: disclosure to mother ($M = 13.2$; $\alpha = .84$); disclosure to father ($M = 10.1$; $\alpha = .71$); disclosure to friend ($M = 19.7$; $\alpha = .89$) and disclosure to dating partner ($M = 21.9$; $\alpha = .94$). In another sample of 698 heterosexual dating couples (1,396 individuals) aged 18–30 years ($M = 21.9$, $SD = 2.5$) from the northeastern United States, who were mostly (76%) White/European American, the reliability for the SSDS disclosure to partner scale was $\alpha = .88$, with a mean score of $M = 3.02$, $SD = .52$ (Greene & Faulkner, 2005). In this sample, a factor analysis (varimax rotation) indicated all items comprised a single factor (with all items loading above .6).

Validity

Validity for the scale is indicated by the relative mean scores for each target scale, as previous research has found greater disclosure to friends and dating partners than to parents, and the least amount of disclosure to fathers (Herold, 1984). Moreover, the SSDS scale for disclosure to partner has correlated significantly with dyadic sexual communication, assertive sexual initiation, assertive sex talk, and relationship satisfaction in young adult heterosexual couples (rs = .42, .49, .31, .29, respectively, all ps < .001; Greene & Faulkner, 2005), and with safer sex practices in undergraduate college women ($r = .16$, $p < .001$; Cobb, 1997), indicating convergent validity.

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Exhibit

Sexual Self-Disclosure Scale

You are to read each item in the next section of the questionnaire and then indicate the extent that you have talked about that item to each person (i.e., the extent to which you have made your attitudes and/or behaviors known to that person). Use the rating scale below to describe the extent that you have talked about each item.

The rating scale is:

(1) Have told the person *nothing* about this aspect of me.
(2) Have talked only in *general terms* about this item.
(3) Have talked in *some detail* about this item but have not fully discussed my own attitudes or behaviors.
(4) Have talked in *complete detail* about this item to the other person. He or she knows me fully in this respect.

Choose one number in the row which corresponds to the amount of your disclosure.

These items refer to: *(indicate target group: mother, father, close friend of the same sex, or dating partner)*

	No Disclosure	Only General Terms	Some Details	Complete Details
1. My personal views on sexual morality	○	○	○	○
2. Premarital sexual intercourse	○	○	○	○
3. Oral sex	○	○	○	○
4. Masturbation	○	○	○	○
5. My sexual thoughts or fantasies	○	○	○	○
6. Sexual techniques I find or would find pleasurable	○	○	○	○
7. Use of contraception	○	○	○	○
8. Sexual problems or difficulties I might have	○	○	○	○

Parent–Adolescent Communication Scale

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The Parent–Adolescent Communication Scale (PACS) was developed to assess adolescent girls' frequency of sexual communication with their parents (Sales et al., 2008).

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Development

The PACS was developed as part of a NIMH-funded intervention grant (Sales et al., 2008). Domains pertinent to sexual communication were selected based on a review

of the empirical literature. These included (a) pregnancy, (b) STDs, (c) HIV/AIDS, (d) condom use, and (e) general information about sex. Focus groups of African American adolescent females were conducted to verify that these topics were relevant in their sexual relationships. Thirty-six items were created to assess communication in these domains. Health educators assessed face validity of the items. The measure was pilot-tested on 15 African American adolescent females 14 to 18 years of age. Based on their suggestions, items were revised to enhance reading comprehension. Items that were highly correlated and thought to assess the same construct, as well as items that decreased the Cronbach's alpha below .90, were deleted, leaving a five-item scale. Data from one longitudinal evaluation study were used to validate the measure (Sales et al., 2008).

Though the PACS was designed for adolescent females, and validated with an African American female sample, the items are more broadly applicable to individuals of other racial or ethnic backgrounds, other age groups, and males. Since its original publication in 2008, the PACS has been successfully used in research with various groups of adolescents and young adults in the U.S. (e.g., Boyas, Stauss & Murphy-Erby, 2012; Hopfer, 2012), including males (e.g., Miller et al., 2015) and immigrant populations (e.g., Meschke & Dettmer, 2012). Further, the PACS has been administered around the globe, including in Brazil (Gubert et al., 2013), Tanzania (Mlunde et al., 2012), Ethiopia (Negeri, 2014), South Africa (Magidson et al., 2016; Wang, 2009), Kenya (Puffer et al., 2011), and in Mexico (Atieno, Ortiz-Panozo, & Campero, 2015). The PACS has also been systematically translated and validated in Portuguese among a Brazilian adolescent sample (Gubert et al., 2013).

Response Mode and Timing

A single stem is used for all items: "In the past six months, how often have you and your parent(s) talked about the following things . . ." Each item requires a response on a Likert-type scale: 1 (*never*), 2 (*rarely*), 3 (*sometimes*), and 4 (*often*). The scale typically takes less than 5 minutes to complete.

Scoring

All items are coded so that higher values indicate more frequent sexual communication with parents. Scores on the five items are summed to create a scale score. Scores range from 5 to 20. The mean score for participants in our validation sample was 14.20 (SD = 4.79; Sales et al., 2008).

Reliability

Cronbach's alpha for the PACS was .88 at baseline (N = 520), .89 at the 6-month follow-up assessment (N = 467), and .90 at the 12-month follow-up assessment (N = 447). Stability of the measure was assessed by Pearson correlation. Because it has been suggested that the length of time between reliability assessments mirrors the length of time in intervention studies (Gliner, Morgan, & Harmon, 2001), measurement stability was assessed with 6 months between administrations. The intercorrelation between baseline and 6-month follow-up scores was significant (r = .58, $p < .001$), as was the intercorrelation between baseline and 12-month follow-up scores (r = .53, $p < .001$; Sales et al., 2008).

Validity

The PACS was correlated with other related constructs in the predicted directions (Sales et al., 2008). Concurrent validity was assessed by correlating frequency of sexual communication with parent(s) as measured by PACS at baseline and other related constructs also assessed at baseline. Specifically, the PACS was positively associated with frequency of sexual communication with partner (Milhausen et al., 2007) and sexual communication self-efficacy (with new partner), family support (Zimet, Dahlem, Zimet, & Farley, 1988), and perceived parental knowledge about their whereabouts. In addition, PACS scores were negatively associated with depressive symptoms. Also, the PACS was positively correlated with recent condom use with steady partners (last vaginal sex, past 30 days, and past 6 months) and was inversely correlated with frequency of vaginal intercourse (past 30 days). The correlations were all significant, and effect sizes were small to moderate (Cohen, 1988).

Predictive validity was assessed by correlating baseline PACS scores to related constructs assessed at 6- and 12-month follow-up assessments. At the 6-month follow-up interval, baseline PACS scores were significantly positively associated with frequency of sexual communication with partner (Milhausen et al., 2007) and sexual communication self-efficacy with a new partner. Also, the PACS was significantly positively associated with condom use during the intervening 6 months between the baseline and 6-month follow-up assessment. At the 12-month follow-up interval, baseline PACS scores were significantly positively associated with frequency of sexual communication (Milhausen et al., 2007) and condom use during the intervening 6 months between the 6-month and 12-month follow-up assessments. Discriminant validity was assessed by correlating the PACS with measures of watching movies or television. These correlations were not significant.

Other Information

The PACS is a brief, self-administered behavioral scale measuring frequency of sexual communication with a parent or parents, suitable for low-literate samples (requiring

a fourth-grade reading level). Researchers may find the PACS particularly useful in sexual health education interventions, particularly family-level interventions, for assessing frequency of sexual communication pre- and post-intervention to evaluate intervention efficacy. The authors would appreciate receiving information about the results obtained with this measure.

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Exhibit

Parent–Adolescent Communication Scale

In the past 6 months, how often have you and your parent(s) talked about the following things …

	Never	Rarely	Sometimes	Often
1. …sex.	○	○	○	○
2. …how to use condoms.	○	○	○	○
3. …protecting yourself from STDs.	○	○	○	○
4. …protecting yourself from AIDs.	○	○	○	○
5. …protecting yourself from becoming pregnant.	○	○	○	○

Female Partner's Communication During Sexual Activity Scale

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This scale assesses female respondents' perceptions of how easy it is to communicate with a partner during sexual activity, and how frequently they communicate desired stimulation to their partners. The scale is composed of three items measuring how easy it is for respondents to communicate with a partner during sexual activity, rated on a 7-point scale, and three items measuring the frequency of use of different verbal and nonverbal communication strategies, rated on a 6-point scale.

Development

Scale development followed an iterative process, whereby items were developed and refined over a series of three studies (McIntyre-Smith, 2010). An initial pool of 20 items was developed and administered to 198 female undergraduate students. Items were subject to individual item analyses and exploratory factor analyses. Fourteen items were deleted due to poor empirical performance or poor conceptual overlap with the construct. The six remaining items were provided to 16 graduate students who rated the items for clarity and provided feedback and suggestions for wording changes (see Hinkin, 1998 and Streiner & Norman, 2008, for evidence for the use of students as item judges). Recommendations to improve item wording were considered if they were suggested by two or more people. For this scale, no wording changes were made. The six items were then administered to a second sample of 242 female undergraduate participants and items were subjected to item analyses and exploratory factor analyses. Two items were deleted and two additional items were written. The six remaining items were administered to 211 female undergraduate participants and responses were subjected to item analyses and test–retest reliability analyses. All six items were retained for the final scale.

Decision-making regarding item-deletion was based on the following scale development guidelines (see Netemeyer, Bearden, & Sharma, 2003 and Streiner & Norman, 2008): (a) range restriction problems (i.e., more than 50% of the sample endorsed a single response option, low standard deviations), (b) poor inter-item correlations with two or more scale items ($r < .30$), (c) poor corrected item-total correlations ($r < .30$), (d) high cross-loadings on non-target factors (> .35 or more), (e) low percentage of variance accounted for within items (i.e., poor communalities; < .30), (f) low clarity ratings by expert raters (mean < 5.5 on a 7-point scale), (g) poor item wording as judged by expert raters, (h) redundancy with other items, (i) poor conceptual overlap (i.e., item was judged to be too dissimilar from other items and/or to poorly reflect the construct).

Sampling was conducted with three groups of female undergraduate students aged 17–49 (mean age = 18.83–19.24, *SD* = 2.67–3.38) who were heterosexually active (i.e., they reported having sexual intercourse with a male partner at least twice per month). As this scale was developed based on responses from undergraduate female participants, it is most appropriate for use with this population. Future studies examining the use of this measure with additional populations are needed.

Response Mode and Timing

Response choices are given below under Scoring. Respondents are provided with the scale and instructions and are asked to complete the survey on their own and with as much privacy as possible. The scale was administered using the Internet for the purpose of scale development research. Paper-and-pencil administration of the scale requires 2–5 minutes.

Scoring

1. Score Items 1–3 as:

   1 = *Very Difficult*
   2 = *Moderately Difficult* . . .
   7 = *Very Easy*

2. Score Items 4–6 as:

   0 = 0%
   1 = 1–25%
   2 = 26–50%
   3 = 51–75%

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4 = 76–99%
5 = 100%

3. Because Items 4–6 are essentially keyed on a 5-point scale (i.e., there is no conceptual equivalent to the 0% response option on the 7-point scales for Items 1–3), and the rest of the items are coded on a 7-point scale, items should be weighted in the following manner:
   a. Multiply Items 1–3 by 5.
   b. Multiply Items 4–6 by 7.
4. Calculate the average score or the total score for all items. Higher scores indicate a greater self-rated ease and frequency of sexual communication with a partner during sexual activity.
5. Calculate subscale scores if desired:
   a. *Ease of Sexual Communication*: Items 1–3.
   b. *Frequency of Sexual Communication*: Items 4–6.

When calculating subscale scores, items do not need to be weighted within a given subscale because the response options are the same for all items (e.g., Items 1-3 are all answered on a 7-point scale).

Reliability

In Study III, when all six items were available for calculating reliability, internal consistency of the total scale was good ($\alpha = .83$, $N = 211$). In Studies I and II, only four of the final six items were available, and internal consistency scores were somewhat lower as a result ($\alpha = .76$ to .77, Ns = 198 and 242). The corrected item-to-total correlations across all three studies were good, $r = .54$ to .63, as were the inter-item correlations, $r = .27$ to .64. Four-week test–retest reliability was reasonable for the total scale ($r = .72$, $N = 211$).

As the two subscales were composed of only two or three items each (two items in Studies I and II, and three items in Study III), internal consistency estimates were somewhat lower than for the total scale ($\alpha = .64$ to .79). Nonetheless, the inter-correlations between subscale items ranged from $r = .51$ to .64, suggesting that the items can be combined to form a subscale. Four-week test–retest reliability was reasonable for both subscales ($r = .65$ to .67).

Validity

It was hypothesized that correlations between scores on the Female Sexual Function Index (FSFI; Rosen et al., 2000) and scores on the Female Partner's Communication During Sexual Activity Scale would provide evidence of convergent validity because communication with a partner has been shown to facilitate sexual response during sexual activity with a partner (e.g., Hayes et al., 2008). As hypothesized, the Female Partner's Communication During Sexual Activity Scale and subscales scores were associated with the total FSFI score ($r = .30$ to .37), as well as scores on the Desire ($r = .19$ to .23), Arousal ($r = .19$ to .23), and Satisfaction ($r = .26$ to .30) subscales.

Other evidence of convergent validity includes the correlation of the total score and subscales with the Sexual Opinion Survey measure of erotophobia—erotophilia ($r = .16$ to .27), which is the tendency to respond to sexual stimuli with negative-to-positive affect and avoidant-to-approach behavior (Fisher, Byrne, White, & Kelley, 1988); and with the Dyadic Sexual Regulation Scale ($r = .33$ to .47), which measures the degree to which the respondent initiates sexual activity (versus waiting for a partner to do so), and is an active (versus more passive) participant during sexual activity (Catania, McDermott, & Wood, 1984). Frequency of intercourse ($r = .25$ to .47) and frequency of masturbation ($r = .22$ to .27) were also correlated with the total scale and subscale scores. The Female Partner's Communication During Sexual Activity Scale and subscales were not correlated with the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) or with measures of depression and anxiety (Henry & Crawford, 2005), providing evidence of discriminant validity and freedom from response bias.

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Exhibit

Female Partner's Communication During Sexual Activity Scale

The following questions ask about your thoughts and feelings concerning sexual activities with a partner and your sexual experiences. You are asked to rate each item on the scale provided. Please check off one box per item to indicate your response.

	Very Difficult	Moderately Difficult	Slightly Difficult	Neither Easy nor Difficult	Slightly Easy	Moderately Easy	Very Easy
1. Telling my partner what to do to stimulate me during intercourse would be …	○	○	○	○	○	○	○
2. Showing my partner what to do to stimulate me during intercourse would be …	○	○	○	○	○	○	○
3. Asking my partner to stimulate me to orgasm (i.e. by massaging my genitals/ clitoris) when I have intercourse with my partner would be …	○	○	○	○	○	○	○

When having sex with a partner, how often do you …

	0% of the time	1–25 % of the time	26–50% of the time	51–75% of the time	76–99% of the time	100% of the time
4. …tell your partner what feels good?	○	○	○	○	○	○
5. …show your partner what feels good?	○	○	○	○	○	○
6. …ask your partner to stimulate your clitoris to orgasm?	○	○	○	○	○	○

Partner Communication Scale

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The Partner Communication Scale (PCS) was developed to assess frequency of communicating about sexual topics with a male sex partner among African American adolescent females (Milhausen et al., 2007).

Description

The PCS was developed as part of an NIMH-funded intervention grant (Milhausen et al., 2007). Domains pertinent to sexual communication were selected based on a review of the empirical literature. These were (a) pregnancy; (b) STDs; (c) HIV/AIDS; (d) condom use; and (e) partner's sex history. Focus groups of African American adolescent females were conducted to verify that these topics were relevant in their sexual relationships. Thirty-six items were created to assess communication in these domains. Health educators assessed face validity of the items. The measure was pilot-tested on 15 African American adolescent females, 14 to 18 years of age. Based on their suggestions, items

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were revised to enhance reading comprehension. Items that were highly correlated and thought to assess the same construct, as well as items that decreased the Cronbach's alpha below .90, were deleted, leaving a five-item scale. Data from three studies were used to validate the measure (Milhausen et al., 2007).

Though the PCS was designed for, and validated with, samples of African American adolescent females, the items are likely more broadly applicable to individuals of other racial or ethnic backgrounds, to other age groups, and, as well, to males.

Response Mode and Timing

A single stem is used for all items, "During the past six months, how many times have you and your sex partner discussed . . ." Each item requires a response based on a Likert-type scale: 0 (*never*); 1 (*sometimes, 1–3 times*); 2 (*often, 4–6 times*); 3 (*a lot, 7 or more times*). The scale typically takes less than five minutes to complete.

Scoring

All items are coded so that higher values indicate more frequent sexual communication. Scores on the five items are summed to create a scale score. Scores range from 0 to 15. The mean score for participants in Study 1 was 8.47 ($SD = 4.31$, $N = 522$); in Study 2 the mean score was 7.59 ($SD = 5.04$, $N = 243$). In Study 3, the mean score was 6.46 ($SD = 4.32$, $N = 715$; Milhausen et al., 2007).

Reliability

Stability of the measure was assessed by Pearson correlation. Because it has been suggested that the length of time between reliability assessments should mirror the length of time in intervention studies (Gliner, Morgan, & Harmon, 2001), measurement stability was assessed with 6 months between administrations. In Study 1, baseline and 6-month follow-up responses were correlated at .44. Baseline and 12-month follow-up responses were correlated at .38 (Milhausen et al., 2007). In Study 2, baseline and 6-month follow-up responses were correlated at .37. Correlations may be low because participants were referring to different partners at each completion point. In Study 1, the Cronbach's alpha was .80 at baseline ($N = 522$), .87 at 6-month follow-up, and .87 at 12-month follow-up. In Study 2, the Cronbach's alpha for the PCS was .90 ($N = 243$). In Study 3, the Cronbach's alpha was .84 at baseline ($N = 715$) and .89 at 6-month follow-up ($N = 313$; Milhausen et al., 2007).

Among a sample of female college students attending a four-year public university in Florida, the scale produced a Cronbach's alpha of .80 (Chandler et al., 2013). Similarly, among another study of female undergraduate students, the PCS produced a Cronbach's alpha of .87 with a test–retest reliability of $r = .83$ (Grauvogl, Peters, Evers, & van Lankveld, 2015). A study of African American adolescent and young adult females reported a Cronbach's alpha of .85 (Swartzendurber et al., 2015). Another study of African American adolescent and young adult females (ages 14–20) reported a Cronbach's alpha of .85 (Sales, DiClemente, Brody, Philibert, & Rose, 2014). Among a sample of 18–24-year-old minority women, the scale reported a Cronbach's alpha of .68 for the entire sample, .54 for Black women, and .76 for Latina women (Crosby, Salazar, & Geter, 2017).

A revised version of the PCS for young Black men who have sex with men (MSM) yielded a Cronbach's alpha of .87 (Crosby et al., 2016).

For transgender women and their male partners, the scale produced a Cronbach's alpha of .91 for transgender women and .92 for male partners at baseline (Operario et al., 2017).

Validity

The PCS was correlated with other related constructs in the direction that was predicted in both Study 1 and Study 2 (Milhausen et al., 2007). Specifically, in Study 1, the PCS was correlated with frequency of sexual communication with a parent (Sales et al., 2008) and sexual communication self-efficacy (with new partner and boyfriend), and the effect sizes were moderate (Cohen, 1988). Small but significant positive correlations were found between the PCS and relationship satisfaction and self-esteem. Small but significant negative correlations were found between the PCS and fear of consequences of condom negotiation and partner-related barriers to condom use (St. Lawrence et al., 1999). The PCS was correlated positively with condom use at last vaginal sex with steady and nonsteady partners, condom use during the past 30 days with steady and nonsteady partners, and condom use with a steady partner over the previous 6 months. Discriminant validity was assessed by correlating the PCS with measures of watching movies or television. These correlations were not significant. In Study 2, the PCS was correlated with sexual communication with parents (Sales et al., 2008), self-esteem (Rosenberg, 1965, 1989), sexual refusal self-efficacy, and receiving sex education in schools (Milhausen et al., 2007). In Study 2, the PCS did not correlate significantly with partner-related barriers to condom use (St. Lawrence et al., 1999).

Chandler et al. (2013) found PCS scores to be statistically higher among Black and Hispanic college women, especially those in a current relationship. Swartzendurber et al. (2015) reported significant associations between measures of partner sexual communication and arousability, and partner communication frequency and refusal of sex self-efficacy. In an intervention addressing genetic and

psychosocial factors associated with adolescent condom behaviors, higher levels of partner communication were significantly associated with increases in condom use at post-intervention (Sales et al., 2014).

Other Information

The PCS is a brief, self-administered behavioral scale measuring frequency of sexual communication with a male partner, suitable for low-literate samples (requiring a fourth grade reading level). Researchers may find the PCS particularly useful in sexual health education interventions, assessing frequency of sexual communication pre- and post-intervention to evaluate intervention efficacy. The authors would appreciate receiving information about the results obtained with this measure.

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Exhibit

Partner Communication Scale

During the past six months, how many times have you and your sex partner discussed …

	0 Never	1 Sometimes (1–3 Times)	2 Often (4–6 Times)	3 A Lot (7 or More Times)
1. …how to prevent pregnancy.	○	○	○	○
2. …how to use condoms.	○	○	○	○
3. …how to prevent the AIDS virus.	○	○	○	○
4. …how to prevent STDs.	○	○	○	○
5. …your partner's sex history.	○	○	○	○

Sexual Communication Self-Efficacy Scale

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The 20-item Sexual Communication Self-Efficacy Scale (SCSES; Quinn-Nilas et al., 2016) is an instrument to assess sexual communication self-efficacy which incorporates both positive and risk-related sexual communication topics. Sexual communication is a key factor influencing sexual health behavior and condom use. Self-efficacy, beliefs about one's ability to engage in a desired behavior or achieve a level of performance, may be a key factor in supporting adolescent sexual communication. There are several existing scales which measure aspects of sexual communication, for example, some focusing on parent–adolescent communication, others assessing sexual communication frequency. Many scales focus primarily on risk reduction, and do not approach the topic from a perspective that also considers communicating about positive sexuality topics. The SCSES focuses both on risk reduction, and positive sexual communication. Factor structure, validity, and internal consistency reliability of the scale are reported in Quinn-Nilas et al. (2016).

Development

Items were developed based on a review of the literature and consultations with sexual health educators to assess six sexual risk-related areas (e.g., IV drug use, STI history), and then reviewed in focus groups with African-American adolescent girls to determine their relevance and phrasing. Eighteen items were developed in the initial pool, and pilot testing reduced these to seven. Additional SCSES items were developed to assess constructs not incorporated in the original measure (i.e., such as related to sexual pleasure or sexual negotiation). Interviews with 12 adolescents from London, U.K., were also conducted to ensure young people understood the meaning of the items. Based on feedback from these adolescents, 22 items were used in subsequent factor analysis.

Exploratory factor analysis (using Oblimin rotation) was conducted with a sample of 374 U.K. adolescents recruited as a part of the Sexunzipped trial (for more information on study design and data collection, see Bailey et al., 2013 and Bailey et al., 2018). Analyses supported five factors composed of 20 items for the final scale (two items from the original scale were removed due to low loadings across multiple factors): Contraception Communication (e.g., "Discuss contraception?"), Positive Sexual Messages (e.g., "Tell them you want to have sex more often?"), Negative Sexual Messages (e.g., "Tell them that a sexual activity hurts you?"), Sexual History (e.g., "Ask if they have shared needles?"), and Condom Negotiation (e.g., "Demand that a condom be used?"). Items were retained if they had strong factor loadings (above .40) on a single factor. The communalities of the 20-item solution ranged from .35 to .82 (Quinn-Nilas et al., 2016).

Response Mode and Timing

The questionnaire can be completed using pencil and paper or a computer survey in approximately 5 minutes.

Scoring

The scale is scored using a 4-point scale: 1 (*Very difficult*), 2 (*Difficult*), 3 (*Easy*), and 4 (*Very easy*). None of the items are reverse scored. There are five subscales; their respective scores are calculated by taking the means of the subscale's items. *Sexual History* items are Items 1 to 4; *Condom Negotiation* items are 5 to 7; *Negative Sexual Messages* items are 8 to 10, and 12; *Positive Sexual Messages* items are 11, 13, 14, 18, 19, and 20; *Contraceptive Communication* items are 15 to 17. Means and standard deviations from 374 UK adolescents (Bailey et al., 2013) as reported in Quinn-Nilas et al. (2016) are shown in Table 1.

TABLE 1
Means and Standard Deviations of SCSES Subscales

Subscale	*M*	*SD*
Contraception Communication	1.75	.68
Negative Sexual Messages	1.93	.69
Positive Sexual Messages	1.76	.60
Sexual History	2.15	.77
Condom Negotiation	1.66	.69

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TABLE 2
Correlations between Sexual Communication Self-Efficacy Subscales and Measures used in Assessing Construct Validity

Variable name	Sexual communication frequency	Dyadic sexual communication	Communication intentions	Relationship quality	Condom self-efficacy
Contraception Communication	.33**	.56**	.20**	.37**	.55**
Negative sexual messages	.26**	.43*	.21**	.30**	.50**
Positive sexual messages	.33**	.42**	.26**	.31**	.55**
Sexual history	.23**	.25**	.29**	.32**	.51**
Condom negotiation	.27**	.30**	.19**	.32**	.30**

*$p <$ .05. **$p <$ .01.

Reliability

Internal consistency (Cronbach's alpha) for the subscales was high: Contraceptive communication (α = .89), Negative Sexual Messages (α = .87), Positive Sexual Messages (α = .88), Sexual History (α = .82), Condom Negotiation (α = .83). Internal consistency for the total scale was .93 (Quinn-Nilas et al., 2016).

Validity

Convergent validity has been supported with significant correlations between each subscale of the SCSES and dyadic sexual communication (Catania et al., 1989), in addition to items created for this study including sexual communication frequency, condom use self-efficacy, and communication intentions (correlations shown in Table 2). Concurrent validity was supported with significant correlations between all SCSES subscales and relationship quality items created for this study (Quinn-Nilas et al., 2016).

A Flesch–Kincaid assessment indicated that literacy grade level was 4.5. This indicates that a person would need to have reached between the fourth and fifth grade to understand the language used. The Flesch Reading Ease score was 78.1 (scores range from 0 to 100, with higher scores indicating easier text to read).

Summary

The 20-item Sexual Communication Self-Efficacy Scale (SCSES) is an instrument for assessing sexual communication self-efficacy between partners and incorporates both positive and risk-related sexual communication topics. It was developed in consultation with sexual health professionals, and through two focus groups with adolescents. Factor structure, validity, and internal consistency reliability of the scale were reported in Quinn-Nilas et al. (2016).

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Exhibit

Sexual Communication Self-Efficacy Scale

When communicating about sex with a partner, how easy or difficult would it be for you to …?

	Very Difficult	Difficult	Easy	Very Easy
1. Ask how many partners they have had?	○	○	○	○
2. Ask if they have ever shared needles?	○	○	○	○
3. Ask if they are having sex with other people?	○	○	○	○
4. Ask if they have ever had a sexually transmitted infection?	○	○	○	○
5. Ask if a condom could be used for sex with them?	○	○	○	○
6. Demand that a condom be used?	○	○	○	○
7. Refuse to have sex if they won't use a condom?	○	○	○	○
8. Tell them a certain sexual activity hurts you?	○	○	○	○
9. Tell them if a certain sexual activity makes you uncomfortable?	○	○	○	○
10. Tell them that a certain sexual activity is not making you feel good?	○	○	○	○

11. Suggest a new sexual activity (e.g., a new sexual position)?	○	○	○	○
12. Tell them you do not want to have sex?	○	○	○	○
13. Tell them you would like to have sex more often?	○	○	○	○
14. Tell them that a sexual activity feels good?	○	○	○	○
15. Talk about how it feels to use a condom?	○	○	○	○
16. Talk about how to put on a condom?	○	○	○	○
17. Talk about whether a condom is on correctly?	○	○	○	○
18. Tell them that you want to have sex?	○	○	○	○
19. Tell them that you like a specific sexual activity?	○	○	○	○
20. Initiate sex?	○	○	○	○

Sexual Communication Patterns Questionnaire

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The Sexual Communication Patterns Questionnaire (S-CPQ) is a measure of couples' communication patterns concerning problems in the sexual relationship. It consists of 22 items that ask individuals to report on the likelihood that they and their partner use particular patterns of communication when discussing sexual problems. The S-CPQ is composed of two subscales measuring collaborative and negative sexual communication patterns (SCP). The *Collaborative SCP* subscale measures the likelihood of couples discussing sexual problems through a process of positive approach behaviors (e.g., problem-solving, sharing feelings); in contrast, the *Negative SCP* subscale measures the likelihood of couples engaging in negative communication processes (e.g., expressions of high negative affect or avoidance). Within each subscale, items reflect both mutual (i.e., both partners engage in the same behavior; 10 items) and non-mutual (i.e., each partner engages in a different behavior; 12 items) communication patterns that are measured from the perspective of each partner (e.g., you nag and your partner withdraws; your partner nags and you withdraw). Items also refer to three time points: when problems first arise (3 items), during discussions of problems (10 items), and after discussions of problems (9 items).

Development

The S-CPQ was adapted from the Communication Patterns Questionnaire, a well-validated measure of couples' general communication patterns around relationship conflicts (Christensen & Sullaway, 1984; Crenshaw, Christensen, Baucom, Epstein, & Baucom, 2017). It was originally adapted for use in non-relationally distressed couples where a female partner suffers from genito-pelvic pain/penetration disorder (GPPPD). Based on consultation with clinical sex researchers, 23 out of 35 of the original items were deemed relevant. In line with existing theoretical and empirical evidence around relationship communication (e.g., Woodin, 2011), this subset of items reflected processes of communication that involve positive approach behaviors (e.g., disclosure), moderate negative approach behaviors (e.g., criticism), and avoidance behaviors (e.g., withdrawal) from one or both members of the couple. Twelve items from the original measure were excluded because they reflected more severe negative approach behaviors (e.g., physical aggression, threat), and couples exhibiting intimate partner violence were not a target of our GPPPD sample.

Although the S-CPQ was developed for use with couples coping with GPPPD and no intimate partner violence, the items refer to sexual problems broadly and are also relevant for community and other clinical samples. In an online community sample of 263 sexually active, English-speaking US residents between the ages of 18 and 45 who were in a committed relationship for a minimum of three months, a principal factor analysis with promax oblique rotation revealed a two-factor solution. Cumulatively, the extracted factors accounted for 57.7 percent of the variance (Rancourt & Rosen, 2016). Fourteen items loaded on the first factor, which accounted for 45.4 percent of the shared variance and was labelled the *Negative SCP* subscale. Eight items loaded on the second factor, which accounted for 12.2 percent of the shared variance and was labelled the *Collaborative SCP* subscale). The factor loadings of all individual items were >.35, with the majority

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of factor loadings above .60. One item cross-loaded on both factors (factor loading > .32; Tabachnick & Fidell, 2007) and was removed from the measure.

Response Mode and Timing

Participants indicate how likely it is, on a Likert-type scale, that they and their partner use each pattern of communication when discussing problems in their sexual relationship. The measure takes approximately 5 to 10 minutes to complete.

Scoring

Each item on the S-CPQ is scored from 1 (*very unlikely*) to 9 (*very likely*). Items are summed to create subscale scores, with higher scores indicating a greater likelihood of using the pattern of sexual communication. The *Negative SCP* subscale involves summing Items 2, 3, 5, 7, 8, 9, 10, 11, 14, 15, 19, 20, 21, 22 (range: 14–126). The *Collaborative SCP* subscale involves summing Items 1, 4, 6, 12, 13, 16, 17, 18 (range: 8–72).

Reliability

Within the aforementioned online community sample, the subscales for the S-CPQ showed good to excellent internal consistency (*Negative SCP*: α =.93, *Collaborative SCP*: α =.89; Rancourt, Flynn, Bergeron, & Rosen, 2017). In a sample of 87 couples coping with GPPPD, the subscales showed acceptable to good internal consistency in women with GPPPD (*Negative SCP*: α =.85, *Collaborative SCP*: α =.77) and in their partners (*Negative SCP*: α =.87, *Collaborative SCP*: α =.77; Rancourt et al., 2017).

Validity

Pearson's correlations between the S-CPQ and conceptually-related constructs support the convergent validity of this measure. Within the community sample (Rancourt & Rosen, 2016), the SCP subscales were correlated with the dyadic sexual communication scale (*Negative SCP:* $r = -.68$, $p < .001$; *Collaborative SCP:* $r = .72$, $p < .001$), sexual satisfaction (*Negative SCP:* $r = -.36$, $p < .001$; *Collaborative SCP:* $r = .53$, $p < .001$), and sexual problems (*Negative SCP:* $r = .32$, $p < .001$; *Collaborative SCP:* $r = -.40$, $p < .001$). Within the GPPPD sample (Rancourt et al., 2017), SCP subscales were correlated with relationship satisfaction for women with GPPPD (*Negative SCP:* $r = -.40$, $p < .01$; *Collaborative SCP:* $r = .44$, $p < .01$) and their partners (*Negative SCP:* $r = -.54$, $p < .01$; *Collaborative SCP:* $r = .55$, $p < .01$). Individuals' own *Negative SCP* was positively correlated with sexual distress for women with GPPPD ($r = .26$, $p < .05$) and partners ($r = .34$, $p < .05$). Individuals' own *Collaborative SCP* was positively correlated with sexual satisfaction for women with GPPPD ($r = .32$, $p < .01$) and partners ($r = .30$, $p < .01$), and partners' *Negative SCP* was negatively correlated with their own sexual satisfaction ($r = -.28$, $p < .01$).

In support of the discriminant validity of the S-CPQ, the SCP subscales were not significantly related to participants' age or relationship duration in the community sample (Rancourt & Rosen, 2016). Within the GPPPD sample, the SCP subscales were not significantly correlated with age or years of education for both women with GPPPD and partners (Rancourt et al., 2017).

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Exhibit

Sexual Communication Patterns Questionnaire

We are interested in how you and your partner typically deal with problems in your sexual relationship. Please rate each item on a scale of 1 (= very unlikely) to 9 (= very likely), using the scale provided on the following pages.

A. When issues or problems arise in the sexual relationship, how likely is it that . . .

	1 Very Unlikely	2	2	3	4	5	6	7	8	9 Very Likely
1. Both members try to discuss the sexual problem.	○	○	○	○	○	○	○	○	○	○
2. You try to start a discussion about the sexual problem while your partner tries to avoid the discussion.	○	○	○	○	○	○	○	○	○	○

3. Your partner tries to start a discussion about the sexual problem while you try to avoid the discussion.	○	○	○	○	○	○	○	○	○	○

B. During a discussion of issues or problems in the sexual relationship, how likely is it that …

	1 Very Unlikely	2	3	4	5	6	7	8	9 Very Likely
4. Both members express feelings to each other.	○	○	○	○	○	○	○	○	○
5. Both members blame, accuse, or criticize each other.	○	○	○	○	○	○	○	○	○
6. Both members suggest possible solutions and compromises about the sexual problem.	○	○	○	○	○	○	○	○	○
7. You pressure, nag, or demand while your partner withdraws, becomes silent, refuses to discuss the sexual problem further.	○	○	○	○	○	○	○	○	○
8. Your partner pressures, nags, or demands while you withdraw, become silent, or refuse to discuss the sexual problem further.	○	○	○	○	○	○	○	○	○
9. You criticize while your partner defends him/herself.	○	○	○	○	○	○	○	○	○
10. Your partner criticizes while you defend yourself.	○	○	○	○	○	○	○	○	○
11. Both members threaten each other with negative consequences.	○	○	○	○	○	○	○	○	○
12. You express feelings while your partner offers reasons and solutions.	○	○	○	○	○	○	○	○	○
13. Your partner expresses feelings while you offer reasons and solutions.	○	○	○	○	○	○	○	○	○

C. After a discussion of issues or problems in the sexual relationship, how likely is it that …

	1 Very Unlikely	2	3	4	5	6	7	8	9 Very likely
14. Both members withdraw from each other after the discussion of the sexual problem.	○	○	○	○	○	○	○	○	○
15. Neither partner is giving to the other after the discussion of the sexual problem.	○	○	○	○	○	○	○	○	○
16. Both partners feel the other has understood his/her position.	○	○	○	○	○	○	○	○	○
17. Both partners feel that the sexual problem has been solved.	○	○	○	○	○	○	○	○	○
18. Both partners try to be especially nice to each other.	○	○	○	○	○	○	○	○	○
19. You feel guilty for what you said or did while your partner feels hurt.	○	○	○	○	○	○	○	○	○
20. Your partner feels guilty for what (s)he said or did, while you feel hurt.	○	○	○	○	○	○	○	○	○
21. You try to be especially nice and act as if things are back to normal, while your partner acts distant.	○	○	○	○	○	○	○	○	○
22. Your partner tries to be especially nice and acts as if things are back to normal, while you act distant.	○	○	○	○	○	○	○	○	○

Verbal and Nonverbal Sexual Communication Questionnaire

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The Verbal and Nonverbal Sexual Communication Questionnaire (VNSCQ; Santos-Iglesias & Byers, in press) is a 28-item questionnaire that assesses the frequency of verbal and nonverbal sexual communication that occurs in the context of sexual activity. The VNSCQ has three subscales: *Verbal Sexual Communication, Nonverbal Sexual Initiation and Pleasure*, and *Nonverbal Sexual Refusal*. The VNSCQ was simultaneously validated in Spain; the results and the final Spanish version can be found in Santos-Iglesias and Byers (in press).

Development

In the context of sexual activity, sexual communication can be used for different purposes (e.g., to initiate sexual contacts, to express sexual preferences) and these different purposes can be expressed both verbally and nonverbally (Beres, Herold, & Maitland, 2004; Vannier & O'Sullivan, 2011). Existing measures of sexual communication measures are limited in their usefulness because they tend to focus on verbal communication only, omitting the important role of nonverbal sexual communication, and tap only some of the purposes for which people communicate with a partner about their sexual activity.

To develop the VNSCQ, we first conducted a review of the literature and identified four different purposes for which people communicate about sex in the context of sexual activity: initiation of sexual contacts, refusal of sexual contacts, communication about sexual pleasure, and communication about sexual preferences. We next developed a pool of 44 items (22 verbal and 22 nonverbal) that reflect these four purposes. These items were then edited by another researcher not involved in the initial item development to improve understandability and clarity. Content validity was established using five experts in the field of human sexuality who were provided with the definitions of verbal sexual communication and nonverbal sexual communication who rated each of the 44 items in terms of its representativeness of the construct, whether it represented verbal or nonverbal sexual communication, item understandability, item ambiguity, and item clarity. Twelve items were deleted in this process because they did not reach a content validity index and factorial validity index of .80, resulting in a 32-item version that was tested psychometrically.

The 32-item version was tested using a sample of 216 Canadian undergraduates (86 men and 130 women) who were between the ages of 18 and 38. Participants completed an online survey and were recruited from Introductory Psychology courses and using advertisements posted on campus and online. To determine whether the four purposes were reflected in both the verbal and nonverbal items, we conducted exploratory factor analysis on the verbal and nonverbal items separately. Results for the verbal items showed one general factor, *Verbal Sexual Communication*, that fit the data well after three items were deleted ($\chi^2 = 96.81$, $p < .001$, CFI = .95, TLI = .91, RMSEA = .07). Results for the nonverbal items yielded two factors, *Nonverbal Sexual Initiation and Pleasure* and *Nonverbal Sexual Refusal*, with good fit after deleting one item ($\chi^2 = 155.46$, $p < .001$, CFI = .91, TLI = .88, RMSEA = .07).

Item analysis showed means around the midpoint of the scale for both *Verbal Sexual Communication* and *Nonverbal Sexual Initiation and Pleasure*, indicating that participants engaged in these types of communication frequently. Item means for *Nonverbal Sexual Refusal* were low, indicating that this form of communication occurred infrequently. Item-total corrected correlations between .34 and .74 were indicators of moderate to large item discrimination.

Response Mode and Timing

The questionnaire can be completed in approximately 3 minutes. Items are rated on a 7-point frequency scale from 1 (*never*) to 7 (*always*).

Scoring

Item 25 is reverse-coded. Items from each subscale are summed to obtain subscale scores. Scores for the 13-item *Verbal Sexual Communication* range from 13 to 91 (Items 2, 3, 4, 7, 10, 16, 18, 19, 20, 21, 23, 25, and 27). Scores for the 8-item *Nonverbal Sexual Initiation and Pleasure* range from 8 to 56 (Items 1, 6, 8, 9, 11, 17, 22, and 28). Scores for the seven-item *Nonverbal Sexual Refusal scores* range between

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7 and 49 (Items 5, 12, 13, 14, 15, 24, and 26). Higher scores indicate more frequent sexual communication.

Reliability

The internal consistency of the VNSCQ was examined using Cronbach's alpha. The reliability was good for all subscales for both men (n = 86) and women (n = 130): .87 and .89 for *Verbal Sexual Communication*, respectively; .75 and .85 for *Nonverbal Sexual Initiation and Pleasure*; and .85 and .78 for *Nonverbal Sexual Refusal* (Santos-Iglesias & Byers, in press). A recent study that used the VNSCQ with a sample of 409 young people (172 men, 237 women) between the ages of ages 18 and 24 showed reliabilities of .84 for *Verbal Sexual Communication*, .87 for *Nonverbal Sexual Initiation and Pleasure*, and .85 for *Nonverbal Sexual Refusal* (Hughes, O'Sullivan, & Byers, 2019).

Validity

Because verbal and nonverbal sexual communication often co-occur (Babin, 2012) and greater sexual self-disclosure is associated with greater nonsexual self-disclosure (MacNeil & Byers, 2009), we expected that verbal and nonverbal sexual communication would be positively correlated with each other, and that verbal and nonverbal sexual communication would be positively correlated with other measures of sexual and nonsexual communication. Finally, because greater sexual communication is associated with greater sexual satisfaction (MacNeil & Byers, 2009), we also expected verbal and nonverbal sexual communication to be positively correlated with higher sexual satisfaction.

These predictions related to validity were examined in the sample of 216 Canadian undergraduates using zero-order correlations (Santos-Iglesias & Byers, in press). The results showed that, as predicted, *the Verbal Sexual Communication* and *Nonverbal Sexual Initiation and Pleasure* subscales were positively correlated with each other (r = .54, p < .001) and were also positively correlated with scores on the Sexual Self-Disclosure Questionnaire (Byers & Demmons, 1999; r = .70, p < .001 and r = .37, p < .001, respectively), verbal nonsexual communication, measured by the verbal subscale of the Primary Communication Inventory (PCI; Navran, 1967; r = .38, p < .001 and r = .36, p < .001, respectively), nonverbal nonsexual communication, measured by the nonverbal subscale of the PCI (r = .32, p < .001 and r = .31, p < .001, respectively), and scores on the Global Measure of Sexual Satisfaction (GMSEX; Lawrance, Byers, & Cohen, 2011; r = .45, p < .001 and r = .44, p < .001, respectively). Contrary to our predictions, the *Nonverbal Sexual Refusal* was significantly negatively correlated with *Verbal Sexual Communication* (r = –.14, p < .05) and the GMSEX (r = –.29, p < .001), and it was not significantly correlated with *Nonverbal Sexual Initiation and Pleasure* or other measures of communication. Nonetheless, these results are consistent with previous research that has shown that negative forms of sexual communication, such as the *Nonverbal Sexual Refusal*, are associated with negative relational outcomes (Christensen & Shenk, 1991). Thus, these results support the construct validity of this subscale.

Recently, Hughes and colleagues (2019), using data from 409 young people, found that *Verbal Sexual Communication* and *Nonverbal Sexual Initiation and Pleasure* subscales were positively correlated with closeness to partner (r = .18, p < .001 and r = .19, p < .001, respectively), scores on the Global Measure of Relationship Satisfaction (Lawrance et al., 2011; r = .23, p < .001 and r = .28, p < .001, respectively), the GMSEX (r = .34, p < .001 and r = .30, p < .001, respectively), and sexual frequency (r = .19, p < .001 and r = .11, p < .001, respectively), providing evidence of their construct validity. Consistent with Santos-Iglesias and Byers (in press), *Nonverbal Sexual Refusal* was negatively correlated to partner caring (r = –.16, p < .001) and the GMSEX (r = –.17, p < .001).

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Exhibit

Verbal and Nonverbal Sexual Communication Questionnaire

Partners may communicate with each other about different aspects of their sexual relationship. Think about your sexual relationship with you partner and check the number that best describes how often you communicate to your partner about each sexual topic.

	1 Never	2	3	4	5	6	7 Always
1. I use nonverbal cues (smiling, caressing, etc.) to indicate to my partner that he/she is pleasing me.	○	○	○	○	○	○	○
2. I give sexual praise to my partner when he/she does things that I like.	○	○	○	○	○	○	○
3. It is easy to tell my partner the sexual things that don't work for me and why.	○	○	○	○	○	○	○
4. When I want to, I ask my partner for sex.	○	○	○	○	○	○	○
5. When things go wrong during sex, I avoid being touched by my partner.	○	○	○	○	○	○	○
6. I use nonverbal cues (snuggling, kissing, etc.) to let my partner know that I want to have sex.	○	○	○	○	○	○	○
7. I tell my partner what we need to do differently to increase my sexual pleasure.	○	○	○	○	○	○	○
8. I feel comfortable using nonverbal cues (such as touching, kissing, etc.) to initiate sex with my partner.	○	○	○	○	○	○	○
9. I snuggle and kiss my partner when he/she sexually pleases me.	○	○	○	○	○	○	○
10. I praise my partner when our sexually contacts please me.	○	○	○	○	○	○	○
11. When I want sex, I start things going by touching my partner sexually.	○	○	○	○	○	○	○
12. I use nonverbal cues (e.g., avoiding eye contact) to show my partner that I am not sexually satisfied.	○	○	○	○	○	○	○
13. I stop my partner when he/she does something sexual that I do not like but do not say anything.	○	○	○	○	○	○	○
14. I use nonverbal cues (stop eye contact, use my hands, etc.) to let my partner know if I don't like their sexual techniques.	○	○	○	○	○	○	○
15. When my partner starts to touch me sexually and I'm not interested, I move his/her hands away.	○	○	○	○	○	○	○
16. I feel comfortable asking my partner to try sexual things that we have never done before.	○	○	○	○	○	○	○
17. I feel comfortable snuggling and kissing my partner when he/she pleases me sexually.	○	○	○	○	○	○	○
18. I ask my partner to keep doing the things that sexually please me.	○	○	○	○	○	○	○
19. I tell my partner if I don't want have sex.	○	○	○	○	○	○	○
20. I feel comfortable telling my partner the things that sexually please me.	○	○	○	○	○	○	○
21. I suggest new things for my partner and I to try during our sexual contacts.	○	○	○	○	○	○	○
22. I start to kiss my partner when I want to have sex.	○	○	○	○	○	○	○
23. I feel comfortable telling my partner if I want to have sex.	○	○	○	○	○	○	○
24. When my partner does something that doesn't please me, I usually let them know this nonverbally (such as stopping with my hands or avoiding eye contact) instead of saying something.	○	○	○	○	○	○	○
25. It is difficult for me to ask my partner for sex when I want it.	○	○	○	○	○	○	○
26. I prefer to use nonverbal communication when something goes wrong in my sexual encounters.	○	○	○	○	○	○	○
27. When it comes to sex, I ask my partner to do things that we have never tried before.	○	○	○	○	○	○	○
28. I use eye contact with my partner when I want to initiate sexual contact.	○	○	○	○	○	○	○

Sexual Self-Disclosure Scale

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The literature on human sexuality emphasizes the need for people to discuss the sexual aspects of themselves with others. Snell, Belk, Papini, and Clark (1989) examined women's and men's willingness to discuss a variety of sexual topics with parents and friends by developing an objective self-report instrument, the Sexual Self-Disclosure Scale (SSDS). There are two versions of the SSDS; the first consists of 12 subscales (60 items; Snell & Belk, 1987) and the Revised Sexual Self-Disclosure Scale (SSDS-R; Snell et al., 1989) which consists of 24 three-item subscales (72 items).

Development

Sixty items measuring 12 topics were originally generated based on review of the literature, and were intended to be used by health professionals with their clients. The scale was assessed initially by asking college aged men and women (N = 305) how willing they would be to discuss the topics of the scale with a male and a female therapist (Snell et al., 1989).

Response Mode and Timing

Respondents are asked to indicate how willing they would be to discuss the SSDS sexual topics with the disclosure targets (displayed in columns). A 5-point Likert-type scale (scored 0 to 4) is used to measure the responses: 0 (*I am not at all willing to discuss this topic with this person*), 1 (*I am slightly willing to discuss this topic with this person*), 2 (*I am moderately willing to discuss this topic with this person*), 3 (*I am almost totally willing to discuss this topic with this person*) and 4 (*I am totally willing to discuss this topic with this person*). The original measure presented the following disclosure targets arranged as 4 columns within each response option: (a) your mother; (b) your father; (c) your best male friend, (d) your best female friend. Thus, participants were asked to rate their sexual self-disclosure for each of these targets. Though this specific formatting is not included in the exhibit, note that these targets could be included in whole (using a column structure) or in part (by adding the target to the wording of the measure). The scales take about 20–30 minutes to complete and can be completed via computer or pencil and paper.

Respondents indicate their willingness to discuss the SSDS-R topics with an intimate partner (the disclosure target may be modified, for example, to mother, father, husband, wife, etc.). A 5-point Likert-type scale is used, with each item being scored from 0 to 4: 0 (*I would not be willing to discuss this topic with an intimate partner*), 1 (*I would be slightly willing to discuss this topic with an intimate partner*), 2 (*I would be moderately willing to discuss this topic with an intimate partner*), 3 (*I would be mostly willing to discuss this topic with an intimate partner*), 4 (*I would be completely willing to discuss this topic with an intimate partner*).

Scoring

The SSDS consists of 12 subscales, each containing five separate items. The labels and items for each of these sub-scales are: (a) *Sexual Behavior* (1, 13, 25, 37, 49); (b) *Sexual Sensations* (2, 14, 26, 38, 50); (c) *Sexual Fantasies* (3, 15, 27, 39, 51); (d) *Sexual Attitudes* (4, 16, 28, 40, 52); (e) *Meaning of Sex* (5, 17, 29, 41, 53); (f) *Negative Sexual Affect* (6, 18, 30, 42, 54); (g) *Positive Sexual Affect* (7, 19, 31, 43, 55); (h) *Sexual Concerns* (8, 20, 32, 44, 56); (i) *Birth Control* (9, 21, 33, 45, 57); (j) *Sexual Responsibility* (10, 22, 34, 46, 58); (k) *Sexual Dishonesty* (11, 23, 35, 47, 59); and (l) *Rape* (12, 24, 36, 48, 60).

Subscale scores are summed (none are reverse coded); higher scores correspond to greater willingness to discuss the SSDS sexual topics with a particular person.

The SSDS-R consists of 24 subscales (72 items), each containing three separate items (listed in parentheses): (a) *Sexual Behaviors* (1, 5, 9); (b) *Sexual Sensations* (2, 6, 10); (c) *Sexual Fantasies* (3, 7, 11); (d) *Sexual Preferences* (4, 8, 12); (e) *Meaning of Sex* (13, 18, 23); (f) *Sexual Accountability* (14, 19, 24); (g) *Distressing Sex* (15, 20, 25); (h) *Sexual Dishonesty* (16, 21, 26); (i) *Sexual Delay Preferences* (17, 22, 27); (j) *Abortion and Pregnancy* (28, 33, 38); (k) *Homosexuality* (29, 34, 39); (l) *Rape* (30, 35, 40); (m) *AIDS* (31, 36, 41); (n) *Sexual Morality* (32, 37, 42); (o) *Sexual Satisfaction* (43, 53, 63); (p) Sexual Guilt (44, 54, 64); (q) *Sexual Calmness* (45, 55, 65); (r) *Sexual Depression* (46, 56, 66); (s) *Sexual Jealousy* (Items 47,

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57, 67); (t) *Sexual Apathy* (48, 58, 68); (u) *Sexual Anxiety* (49, 59, 69); (v) *Sexual Happiness* (50, 60, 70); (w) *Sexual Anger* (51, 61, 71); and (x) *Sexual Fear* (52, 62, 72).

Scores are summed (none reverse coded); higher scores indicate greater willingness to discuss the SSDS-R topics with an intimate partner.

Reliability

Cronbach's alpha for the SSDS ranged from a low of .83 to a high of .93 (average = .90) for the female therapist, and from a low of .84 to a high of .94 (average = .92) for the male therapist (Snell et al., 1989). Aronson et al. (2013) used six items (details not presented in published article) from the SSDS in a sample of African American college students.

The Cronbach's alpha for the SSDS-R ranged from a low of .59 to a high of .91 (Snell et al., 1989). Rosier and Tyler (2017) used the sexual behaviors and sexual values and preferences subscales of the SSDS-R on 80 heterosexual couples longitudinally, finding high alphas across all time points: Time 1 ($\alpha = .96$); Time 2 ($\alpha = .96$); Time 3 ($\alpha = .96$); Time 4 ($\alpha = .95$). High alphas ($\alpha = .97$ for men; $\alpha = .95$ for women) were reported in a sample of 513 heterosexual individuals using a selection of SSDS-R subscales (see Jones, 2016).

Validity

Snell et al. (1989) reported that women were more willing to discuss the topics on the SSDS with a female therapist than a male therapist. Also, it was found that people's responses to the SSDS-R varied as a function of respondent gender and sexual topic; this is supported by recent research (Lucas, 2009).

Masaro (2014) sampled 1,266 women using five subscales of the SDSS (sexual behaviors, sexual fantasies, sexual sensations, sexual preferences, meaning of sex); EFA supported the factor structure (with high factor intercorrelations; $r = .46$ to $.89$).

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Exhibit

Sexual Self-Disclosure Scale

The survey is concerned with the extent to which you are willing to discuss the following 60 topics about sexuality with *(insert target person here)*. Indicate how willing you are to discuss these topics with them. Use the following scale:

	I am not at all willing to discuss this topic with this person	I am slightly willing to discuss this topic with this person	I am moderately willing to discuss this topic with this person	I am almost totally willing to discuss this topic with this person	I am totally willing to discuss this topic with this person
1. My past sexual experiences	○	○	○	○	○
2. The things that sexually arouse me	○	○	○	○	○
3. My imaginary sexual encounters	○	○	○	○	○
4. The sexual behaviors which I think people ought to exhibit	○	○	○	○	○

5. What sex means to me	○	○	○	○	○
6. How guilty I feel about sex	○	○	○	○	○
7. How satisfied I feel about the sexual aspects of my life	○	○	○	○	○
8. Times when sex was distressing for me	○	○	○	○	○
9. What I think about birth control	○	○	○	○	○
10. My private notion of sexual responsibility	○	○	○	○	○
11. The times I have faked orgasm	○	○	○	○	○
12. My private views about rape	○	○	○	○	○
13. The types of sexual behaviors I've engaged in	○	○	○	○	○
14. The sexual activities that "feel good" to me	○	○	○	○	○
15. My private sexual fantasies	○	○	○	○	○
16. What I consider "proper" sexual behaviors	○	○	○	○	○
17. What it means to me to make love together with someone	○	○	○	○	○
18. How anxious I feel about my sex life	○	○	○	○	○
19. How content I feel about the sexual aspects of my life	○	○	○	○	○
20. Times when I had undesired sex	○	○	○	○	○
21. How I feel about abortions	○	○	○	○	○
22. The responsibility one ought to assume for one's sexuality	○	○	○	○	○
23. The times I have pretended to enjoy sex	○	○	○	○	○
24. The "truths and falsehoods" about rape	○	○	○	○	○
25. The number of times I have had sex	○	○	○	○	○
26. The behaviors that are sexually exciting to me	○	○	○	○	○
27. My sexually exciting imaginary thoughts	○	○	○	○	○
28. The sexual conduct that people ought to exhibit	○	○	○	○	○
29. What I think and feel about having sex with someone	○	○	○	○	○
30. How depressed I feel about my own sexuality	○	○	○	○	○
31. How happy I feel about my sexuality	○	○	○	○	○
32. Times when I was pressured to have sex	○	○	○	○	○
33. How I feel about pregnancy	○	○	○	○	○
34. My own ideas about sexual accountability	○	○	○	○	○

35. The times I have lied about sexual matters	○	○	○	○	○
36. What women and men really feel about rape	○	○	○	○	○
37. The sexual positions I've tried	○	○	○	○	○
38. The sensations that are sexually arousing to me	○	○	○	○	○
39. My "juicy" sexual thoughts	○	○	○	○	○
40. My attitudes about sexual behaviors	○	○	○	○	○
41. The meaning that sexual intercourse has for me	○	○	○	○	○
42. How frustrated I feel about my sex life	○	○	○	○	○
43. How much joy that sex gives me	○	○	○	○	○
44. The aspects of sex that bother me	○	○	○	○	○
45. My private beliefs about pregnancy prevention	○	○	○	○	○
46. The idea of having to answer for one's sexual conduct	○	○	○	○	○
47. What I think about sexual disloyalty	○	○	○	○	○
48. Women's and men's reactions to rape	○	○	○	○	○
49. The places and times-of-day when I've had sex	○	○	○	○	○
50. The types of sexual foreplay that feel arousing to me	○	○	○	○	○
51. The sexual episodes that I daydream about	○	○	○	○	○
52. My personal beliefs about sexual morality	○	○	○	○	○
53. The importance that I attach to making love with someone	○	○	○	○	○
54. How angry I feel about the sexual aspect of my life	○	○	○	○	○
55. How enjoyable I feel about my sexuality	○	○	○	○	○
56. Times when I wanted to leave a sexual encounter	○	○	○	○	○
57. The pregnancy precautions that people ought to take	○	○	○	○	○
58. The notion one is answerable for one's sexual behaviors	○	○	○	○	○
59. How I feel about sexual honesty	○	○	○	○	○
60. Women's and men's reactions to rape	○	○	○	○	○

Revised Sexual Self-Disclosure Scale

(illustrated for the "intimate partner" target)

Instructions: This survey is concerned with the extent to which you are willing to discuss the following topics about sexuality with an intimate partner. To respond, indicate how much you are willing to discuss these topics with an intimate partner. Use the following scale for your responses:

	I would not be willing to discuss this topic with an intimate partner	I am slightly willing to discuss this topic with an intimate partner	I am moderately willing to discuss this topic with an intimate partner	I am almost totally willing to discuss this topic with an intimate partner	I am totally willing to discuss this topic with an intimate partner
1. My past sexual experiences	○	○	○	○	○
2. The kinds of touching that sexually arouse me	○	○	○	○	○
3. My private sexual fantasies	○	○	○	○	○
4. The sexual preferences that I have	○	○	○	○	○
5. The types of sexual behaviors I have engaged in	○	○	○	○	○
6. The sensations that are sexually exciting to me	○	○	○	○	○
7. My "juicy" sexual thoughts	○	○	○	○	○
8. What I would desire in a sexual encounter	○	○	○	○	○
9. The sexual positions I have tried	○	○	○	○	○
10. The types of sexual foreplay that feel arousing to me	○	○	○	○	○
11. The sexual episodes that I daydream about	○	○	○	○	○
12. The things I enjoy most about sex	○	○	○	○	○
13. What sex in an intimate relationship means to me	○	○	○	○	○
14. My private beliefs about sexual responsibility	○	○	○	○	○
15. Times when sex was distressing for me	○	○	○	○	○
16. The times I have pretended to enjoy sex	○	○	○	○	○
17. Times when I prefer to refrain from sexual activity	○	○	○	○	○
18. What it means to me to have sex with my partner	○	○	○	○	○
19. My own ideas about sexual accountability	○	○	○	○	○
20. Times when I was pressured to have sex	○	○	○	○	○
21. The times I have lied about sexual matters	○	○	○	○	○

22. The times when I might not want to have sex	○	○	○	○	○
23. What I think and feel about having sex with my partner	○	○	○	○	○
24. The notion that one is accountable for one's sexual behaviors	○	○	○	○	○
25. The aspects of sex that bother me	○	○	○	○	○
26. How I would feel about sexual dishonesty	○	○	○	○	○
27. My ideas about not having sex unless I want to	○	○	○	○	○
28. How I feel about abortions	○	○	○	○	○
29. My personal views about homosexuals	○	○	○	○	○
30. My own ideas about why rapes occur	○	○	○	○	○
31. My personal views about people with AIDS	○	○	○	○	○
32. What I consider "proper" sexual behavior	○	○	○	○	○
33. My beliefs about pregnancy prevention	○	○	○	○	○
34. Opinions I have about homosexual relationships	○	○	○	○	○
35. What I really feel about rape	○	○	○	○	○
36. Concerns that I have about the disease AIDS	○	○	○	○	○
37. The sexual behaviors that I consider appropriate	○	○	○	○	○
38. How I feel about pregnancy at this time	○	○	○	○	○
39. My reactions to working with a homosexual	○	○	○	○	○
40. My reactions to rape	○	○	○	○	○
41. My feelings about working with someone who has AIDS	○	○	○	○	○
42. My personal beliefs about sexual morality	○	○	○	○	○
43. How satisfied I feel about the sexual aspects of my life	○	○	○	○	○
44. How guilty I feel about the sexual aspects of my life	○	○	○	○	○
45. How calm I feel about the sexual aspects of my life	○	○	○	○	○
46. How depressed I feel about the sexual aspects of my life	○	○	○	○	○
47. How jealous I feel about the sexual aspects of my life	○	○	○	○	○
48. How apathetic I feel about the sexual aspects of my life	○	○	○	○	○

49.	How anxious I feel about the sexual aspects of my life	○	○	○	○	○
50.	How happy I feel about the sexual aspects of my life	○	○	○	○	○
51.	How angry I feel about the sexual aspects of my life	○	○	○	○	○
52.	How afraid I feel about the sexual aspects of my life	○	○	○	○	○
53.	How pleased I feel about the sexual aspects of my life	○	○	○	○	○
54.	How shameful I feel about the sexual aspects of my life	○	○	○	○	○
55.	How serene I feel about the sexual aspects of my life	○	○	○	○	○
56.	How sad I feel about the sexual aspects of my life	○	○	○	○	○
57.	How possessive I feel about the sexual aspects of my life	○	○	○	○	○
58.	How indifferent I feel about the sexual aspects of my life	○	○	○	○	○
59.	How troubled I feel about the sexual aspects of my life	○	○	○	○	○
60.	How cheerful I feel about the sexual aspects of my life	○	○	○	○	○
61.	How mad I feel about the sexual aspects of my life	○	○	○	○	○
62.	How fearful I feel about the sexual aspects of my life	○	○	○	○	○
63.	How delighted I feel about the sexual aspects of my life	○	○	○	○	○
64.	How embarrassed I feel about the sexual aspects of my life	○	○	○	○	○
65.	How relaxed I feel about the sexual aspects of my life	○	○	○	○	○
66.	How unhappy I feel about the sexual aspects of my life	○	○	○	○	○
67.	How suspicious I feel about the sexual aspects of my life	○	○	○	○	○
68.	How detached I feel about the sexual aspects of my life	○	○	○	○	○
69.	How worried I feel about the sexual aspects of my life	○	○	○	○	○
70.	How joyful I feel about the sexual aspects of my life	○	○	○	○	○
71.	How irritated I feel about the sexual aspects of my life	○	○	○	○	○
72.	How frightened I feel about the sexual aspects of my life	○	○	○	○	○

Family Sex Communication Quotient

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The Family Sex Communication Quotient (FSCQ) was developed as a diagnostic tool to measure a general family orientation to discussion about sex between parents and children (Warren & Neer, 1982, 1983). This orientation is assessed across three dimensions: comfort, information, and value. The *Comfort* dimension was chosen as a main FSCQ measure because people positively experience supportive climates regarded as essential to the exchange of sex-related information between parents and children. The *Information* dimension was included because the home can function as a primary source of sexual learning only through sufficient sharing of information. The *Value* dimension was selected because long-range positive values about family sex communication will influence the likelihood of discussing sex with one's own children.

The *Comfort* dimension measures the perceived degree of openness with which sex is discussed in the family (e.g., "I feel free to ask my parents questions about sex"). The *Information* dimension measures perception of the amount of information learned and shared during discussions (e.g., "I feel better informed about sex if I talk with my parents"). The *Value* dimension measures the perceived overall importance of the family role in sexual learning (e.g., "The home should be a primary place for learning about sex").

Range levels of orientation have been generalized as low (18–39), moderate (40–69), and high (70–90). Descriptive statistics from inception to the present show respondents demonstrating a modest orientation (between 65 and 36) toward family sex communication (Warren & Warren, 2015; Warren, 2006). Basing a strong orientation on a minimum score of 72 that would result if respondents "agree" with all 18 statements, in a typical sample, no more than one in 10 respondents would have a strong orientation (i.e., would agree with all 18 statements; Warren, 2016).

Development

Statements were constructed along definitional lines of face validity for inclusion in the FSCQ dimensions. In the early stages of development, four independent measures of frequency, impact, parental style, and attitudes toward sexual practices were employed to serve as criterion-related validity tests for the FSCQ, all of which proved acceptable (Neer & Warren, 1985).

Early development work on analysis of the 18 items demonstrated that two-thirds were inter-correlated above $r = .60$, one-sixth above $r = .40$, and one-sixth above $r = .30$. Dimension-to-dimension correlations further supported the internal consistency of the FSCQ, with all dimensions correlating above $r = .60$ and the *Comfort* and *Information* dimensions correlating above $r = .80$. Dimension-to-total correlations provided very strong evidence for internal consistency with all dimensions correlating above $r = .80$, while the *Value* and *Information* dimensions each correlated above $r = .90$ with the FSCQ (Neer & Warren, 1985).

The internal structure of the Quotient was examined using factor analysis with a sample of 93 males and 94 females, and only two items from the *Value* dimension failed to contribute to the factor structure. They were not deleted because they did not reduce the alpha estimate of the instrument. Evidence for the reliability of the orientation levels assigned to the FSCQ summed scores was found in significant univariate F ratios ranging from 6.85 to 70.80, with one-half of the items producing F ratios above 40.00, while only four yielded F ratios lower than 20.00. Discriminant analysis resulted in a single discriminant function that correctly classified 87 percent of respondents within their respective membership category (Neer & Warren, 1985).

The FSCQ is most appropriate for American and Canadian populations (Warren, 2000). The extent to which families in other developed countries have effective family sex communication is generally not available (Warren, 1992). When the FSCQ was administered to a Danish sample, however, results were distributed differently from those of the U.S. (Warren, 1987).

Response Mode and Timing

The 18-item FSCQ instrument incorporates six statements for each of three dimensions assessed on a 5-point Likert-type scale. The FSCQ statements are worded according to the perspective of the child (the party initially targeted to study). Respondents are informed that the FSCQ represents personal feelings about family discussion of sex. They are asked to indicate which of five response categories best describes their opinion: SA (*strongly agree*), A (*agree*), N (*neutral* or *don't know*), D (*disagree*), SD (*strongly disagree*). They are advised to answer the questions regardless of whether they have talked about sex with their parents, not to spend much time on any one question, and not to ask others how they are answering their questions. The FSCQ can be completed in 5 minutes or less.

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To distribute the FSCQ to a parent or both parents, some items will need modification. Items 1, 7, and 13 remain the same. Replacement of "my parents" with "my child," and occasional verb adjustment, must happen for Items 2, 3, 4, 5, 6, 8, 10, 11, 14, and 16. Items 9, 12, 15, 17, and 18 will need respective rewording as follows: "I have given my child very little information about sex," "Much of what my child knows about sex has come from family discussions," "My child feels better informed about sex after talking with me," "My child feels free to ask me questions about sex," and "When my child wants to know something about sex, s/he generally asks me."

Scoring

Comfort is measured by Items 2, 5, 8, 11, 14, and 17; *Information* is measured by Items 3, 6, 9, 12, 15, and 18; *Value* is measured by Items 1, 4, 7, 10, 13, and 16. Each SA answer gets a "5," each A a "4," each N a "3," each D a "2," and each SD a "1." Six of the items need to be reverse scored (Items 4, 9, 10, 13, 14, and 16). Reverse scoring means the 5 and 1 weights are interchanged, the 4 and 2 weights are interchanged, and the 3 remains the same. The numbers are then totaled and represent the FSCQ score. As previously noted, range levels of orientation have been generalized as low (18–39), moderate (40–69), and high (70–90). Three subscores are available by summing the items in each dimension.

Reliability

A full discussion of reliability and validity measures can be found in Warren (1995) and Warren and Neer (1986). The initial statistical assessment of the FSCQ showed it to be a highly reliable instrument ($\alpha = .92$; Warren & Neer, 1986). In a study analyzing parental, in addition to children's, completion of the FSCQ, the alpha for mothers was .91 (Warren & Olsen, 2005).

Validity

Many current studies using the FSCQ do so as part of their research arsenal and accept the plenitude of past reliability and validity assessments. For example, Hartmann et al. (2016) used the FSCQ along with seven additional and varied instruments to assess communication about sex between parents and autistic children. A recent study by Zamboni & Silver (2009), however, evaluated properties of the FSCQ as well as Fisher's Weighted Topics scale (Fisher, 1987) and found the two scales to be significantly and positively correlated with one another, and together to encompass all aspects of measurement that Fisher deemed important in the area of family sex communication (i.e., extent, frequency, quality, and content). Because of the conceptual strengths and good psychometric properties of the scales, the researchers proposed their use to assess family sex communication.

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Exhibit

Family Sex Communication Quotient

The following statements represent personal feelings about family discussions of sex. Please select one of the five response categories that best describes your opinion: SA = Strongly Agree, A = Agree, N = Neutral (or Don't Know), D = Disagree, SD = Strongly Disagree. Also, please answer these questions regardless of whether you have ever talked about sex with your parents. Don't spend much time on any one question; make a choice and move to the next. Don't ask others how they are answering their questions, or how they think you should answer yours.

	Strongly Agree	Agree	Neutral (or Don't Know)	Disagree	Strongly Disagree
1. Sex should be one of the most important topics for parents and children to discuss.	○	○	○	○	○
2. I can talk to my parents about almost anything related to sex.	○	○	○	○	○
3. My parents know what I think about sex.	○	○	○	○	○
4. It is not necessary to talk to my parents about sex.	○	○	○	○	○
5. I can talk openly and honestly with my parents about sex.	○	○	○	○	○
6. I know what my parents think about sex.	○	○	○	○	○
7. The home should be a primary place for learning about sex.	○	○	○	○	○
8. I feel comfortable discussing sex with my parents.	○	○	○	○	○
9. My parents have given me very little information about sex.	○	○	○	○	○
10. Sex is too personal a topic to discuss with my parents.	○	○	○	○	○
11. My parents feel comfortable discussing sex with me.	○	○	○	○	○
12. Much of what I know about sex has come from family discussions.	○	○	○	○	○
13. Sex should not be discussed in the family unless there is a problem to resolve.	○	○	○	○	○
14. Sex is too hard a topic to discuss with my parents.	○	○	○	○	○
15. I feel better informed about sex if I talk to my parents.	○	○	○	○	○
16. The least important thing to discuss with my parents is sex.	○	○	○	○	○
17. I feel free to ask my parents questions about sex.	○	○	○	○	○
18. When I want to know something about sex, I generally ask my parents.	○	○	○	○	○

Adolescent Sexual Communication Scale

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The Adolescent Sexual Communication Scale (ASCS) was developed to assess the frequency of sexual health communication between adolescents and their parents, best friends, and dating partners (Widman, Choukas-Bradley, Helms, Golin, & Prinstein, 2014). A robust body of research has shown that adolescents who communicate openly about sexual health issues in each of these important relationships are more likely to make safer sexual decisions, such as increased condom and contraceptive use (for reviews, see Byers, 2011; Commendador, 2010; Widman, Choukas-Bradley, Noar, Nesi, & Garrett, 2016). However, while a number of sexual communication scales exist (e.g., Fisher, 1993; Milhausen et al., 2007; Somers & Canivez, 2003), these scales vary greatly in scope and none include parallel items to assess communication with parents, friends, and partners. Thus, we sought to develop a brief, reliable measure to fill this void. The 18-item ASCS includes three subscales, one each for communication with parents, best friend, and dating partners. Each subscale covers communication about six sexual health topics: (1) condoms; (2) birth control; (3) sexually transmitted diseases (STDs); (4) HIV/AIDS; (5) pregnancy; and (6) sexual abstinence.

Development

Development of the ASCS began with a literature search and review of prior communication scales. From there, a list of potential sexual health topics was generated. Next, feedback on the scale content and item wording was sought from two focus groups of high school students. These students also provided guidance on the definition of dating partners that should be used for the scale. Specifically, they suggested that a dating partner should be defined broadly as a "boyfriend/girlfriend or someone you liked 'more than friends' who you have talked to or hung out with." Based on this formative work, the final scale included six sexual health topics that teens may discuss with parents, friends, and/or partners: (1) condoms; (2) birth control; (3) STDs; (4) HIV/AIDS; (5) pregnancy; and (6) sexual abstinence. Finally, the scale was pilot tested in a sample of 60 youth (50% girls; mean age = 16.2).

Response Mode and Timing

For each item, participants are asked to indicate how much they have talked about each of the six sexual health topics in the past year using a 5-point scale: 0 (*never*), 1 (*1 time*), 2 (*2 or 3 times*), 3 (*4 to 6 times*), and 4 (*7 or more times*). There are separate item stems for communication with parents, best friend, and dating partners. Additionally, there is a screening item prior to the partner communication items to determine if a participant has had a dating partner in the past year. If not, the items about partner communication can be skipped. To avoid assumptions about sexual orientation with the screening item, all participants, regardless of gender, should be asked if they have a boyfriend/girlfriend or other dating partner. The ASCS can be administered in either paper-and-pencil or computerized response format. We recommend computerized administration to increase honest reporting. The ASCS generally takes less than 5 minutes to complete.

Scoring

Items are coded such that higher responses indicate more frequent communication. Scores can be calculated in two ways depending upon the research question. If an investigator is interested in understanding the average frequency of sexual health communication, they can create a mean score of the 6 items for each communication partner (i.e., parent, friend, dating partner). Alternatively, investigators may create a total score that represents the total number of sexual health topics that youth have discussed with each communication partner. To do this, each item should be dichotomized (0 = *never discussed that item* or 1 = *discussed that item 1 time or more*). Then a total sum score can be calculated (possible range = 0 – 6 topics discussed). This was the method we selected in our validation study (Widman et al., 2014) as we wished to compare communication topics between parents, best friends, and dating partners.

Reliability

Data on the reliability and validity of the ASCS come from a longitudinal study of 868 early adolescents recruited from a

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rural area of the southeastern United States (Widman et al., 2014). This sample was 12–15 years old (mean age = 13.1), 54% female, and racially/ethnically diverse (46% White, 24% Black, 22% Hispanic). The internal consistency of the ASCS was determined through Cronbach's alpha coefficients calculated on each of the three subscales in this early adolescent sample. Reliabilities were acceptable for sexual communication with parents (.90), best friends (.87), and dating partners (.88). Internal consistency was also excellent when evaluated among boys and girls separately (Cronbach's alphas ranged from .87 to .90 across subscales). Similarly, internal consistency was strong for youth of all ethnicities (Cronbach's alphas across subscales ranged from .89 to .89 for White youth, .87 to .92 for Black youth, and .86 to .91 for Hispanic youth).

Additionally, to examine the test–retest reliability of the ASCS, we examined the consistency of responding among all youth over one year. Scores were significantly and positively correlated for partner communication ($r = .42$), parent communication ($r = .47$), and friend communication ($r = .43$), with all ps $< .001$.

Validity

The ASCS has high face validity. Evidence for the convergent and criterion validity of the ASCS scale comes from the school-based study of 868 adolescents described above (Widman et al., 2014). First, to demonstrate convergent validity, we found that sexual communication with parents, best friends, and dating partners was strongly correlated, as expected. Specifically, youth who talked more frequently with parents also report more communication with best friends ($r = .42$, $p < .001$) and dating partners ($r = .32$, $p < .001$). Sexual communication with partners and friends is also highly correlated ($r = .56$, $p < .001$). Additionally, we examined evidence for the criterion validity of the ASCS scale. As shown in prior literature on adolescent sexual communication, we found that youth reported more consistent condom use when they scored higher on partner sexual communication ($r = .31$, $p < .001$) and parent sexual communication ($r = .31$, $p < .001$). Sexual communication with best friends was not significantly associated with condom use ($r = .07$, $p = .62$) and warrants additional research attention.

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Exhibit

Adolescent Sexual Communication Scale

Some teenagers talk with their parents, friends, and dating partners about sexual health a lot and other teenagers rarely or never talk about these topics. We want to know how much you have talked about these topics.

1. In *the past year*, how much have you talked to either of your *parents* about the following topics?

	Never talked about this	Talked about this 1 time	Talked about this 2 or 3 times	Talked about this 4 to 6 times	Talked about this 7+ times
a. Using condoms.	○	○	○	○	○
b. Using other forms of birth control, like birth control pills.	○	○	○	○	○
c. Sexually transmitted diseases (STDs).	○	○	○	○	○
d. HIV/AIDS.	○	○	○	○	○
e. Getting pregnant/getting someone else pregnant.	○	○	○	○	○
f. Waiting to have sex until you're older or sexual abstinence.	○	○	○	○	○

2. In *the past year*, how much have you talked to your *best friend* about the following topics?

	Never talked about it	Talked about this 1 time	Talked about this 2 or 3 times	Talked about this 4 to 6 times	Talked about this 7+ times
a. Using condoms.	○	○	○	○	○
b. Using other forms of birth control, like birth control pills.	○	○	○	○	○
c. Sexually transmitted diseases (STDs).	○	○	○	○	○
d. HIV/AIDS.	○	○	○	○	○
e. Getting pregnant/getting someone else pregnant.	○	○	○	○	○
f. Waiting to have sex until you're older or sexual abstinence.	○	○	○	○	○

3. In *the past year*, have you had a boyfriend/girlfriend or someone you liked "more than friends" who you have talked to or hung out with?

○ Yes (We will call this person a dating partner for the next question)
○ No (Skip to end of survey)

In *the past year*, how much have you talked to your *dating partner* about the following topics?

	Never talked about it	Talked about this 1 time	Talked about this 2 or 3 times	Talked about this 4 to 6 times	Talked about this 7+ times
a. Using condoms.	○	○	○	○	○
b. Using other forms of birth control, like birth control pills.	○	○	○	○	○
c. Sexually transmitted diseases (STDs).	○	○	○	○	○
d. HIV/AIDS.	○	○	○	○	○
e. Getting pregnant/getting someone else pregnant.	○	○	○	○	○
f. Waiting to have sex until you're older or sexual abstinence.	○	○	○	○	○

10 Compulsivity, Hypersexuality, and Addiction

Compulsive Sexual Behavior Inventory—13

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Compulsive sexual behavior (CSB) is a clinical syndrome characterized by a period of at least 6 months in which an individual experiences intense, distressing, and recurrent sexual urges, fantasies, or behaviors that significantly interfere with a person's daily functioning. Despite the desire to be free of such preoccupation, individuals with CSB are unable to control their distressing sexual behaviors and thoughts. We designed the Compulsive Sexual Behavior Inventory (CSBI) to assess the severity of compulsive and impulsive sexual behaviors. Since its original version (Coleman, Miner, Ohlerking, & Raymond, 2001), the CSBI has been refined based on empirical investigation of its psychometric properties. The CSBI-13 consists of 13 items from the original CSBI control subscale which quantify difficulty in controlling one's sexual behavior (Miner, Raymond, Coleman, & Swinburne Romine, 2017) and is the hallmark feature of CSB.

Development

A team of clinicians began by designing a scale that measured the ability to control one's sexual behavior, history of sexual violence, and history of sexual abuse (Coleman et al., 2001). Initial participants included a small outpatient population presenting at a sexual health clinic in the Midwestern United States. We endeavored to expand the generalizability of the CSBI by conducting a confirmatory factor analysis in a large sample of Latino men who have sex with men (MSM; $N = 1{,}026$). The resulting scale consisted of 22 items assessing two factors: difficulty in controlling one's sexual behavior, and history of sexual violence (Miner, Coleman, Center, Ross, & Rosser, 2007). Subsequent research revealed that the violence subscale showed inadequate internal consistency among African American women (Carpenter & Miner, 2012) and minimal predictive validity among MSM (Miner et al., 2017). This research prompted a revision resulting in the CSBI-13. We found that the CSBI-13 reliably and accurately identifies individuals who meet criteria for the CSB clinical syndrome among Midwestern MSM (Miner et al., 2017). The CSBI-13 has also been translated into Spanish, French, and Swedish.

Response Mode and Timing

Participants are asked to rate each of the 13 items on a 5-point scale ranging from 1 (*never*) to 5 (*very frequently*). Most participants complete the CSBI-13 within five minutes, and the measure can be administered online or in pencil-and-paper form.

Scoring

Each item is scored according to participants' rating. No items are reverse scored. The total scale score is computed by summing across items. Higher scores indicate greater severity of CSB and a score of 35 or more distinguishes individuals who are likely to meet criteria for the CSB clinical syndrome.

Reliability

The CSBI has shown consistent factor structure in both English and Spanish. Test-retest reliability has been assessed in both languages and results have indicated adequate reliability for both the English version ($\alpha = .86$) and the Spanish version ($\alpha = .93$; Miner et al., 2007).

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Validity

Throughout the development of the CSBI, the scale has demonstrated adequate construct and convergent validity. Initial factor analysis of the CSBI evidenced discriminant validity among controls, those who meet diagnostic criteria for pedophiliac disorder, and those who meet criteria for the CSB clinical syndrome. Subsequent logistic regressions have supported the scales' convergent validity and demonstrated that individuals with higher CSBI scores report greater numbers of sexual partners, more unprotected anal intercourse, and are more likely to report being intoxicated or feeling depressed and lonely during intercourse (Coleman et al., 2010). Additionally, the CSBI-13 has demonstrated criterion validity (Miner et al., 2017). An ROC analysis evidenced that a cutoff of 35 is both sensitive and specific (sensitivity = .72, specificity = .79), and accurately distinguishes individuals with and without CSB 79 percent of the time. Additionally, a screening cut point of 30 was proposed for clinical purposes, which maximizes sensitivity (.82) and still has adequate specificity (.61). Research examining the robustness of the CSBI-13 among a representative USA sample is forthcoming.

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Exhibit

Compulsive Sexual Behavior Inventory

English Version

Select the answer that most accurately describes your response.

	1 Never	2 Rarely	3 Occasionally	4 Frequently	5 Very Frequently
1. How often have you had trouble controlling your sexual urges?	○	○	○	○	○
2. Have you felt unable to control your sexual behavior?	○	○	○	○	○
3. How often have you used sex to deal with worries or problems in your life?	○	○	○	○	○
4. How often have you felt guilty or shameful about aspects of your sexual behavior?	○	○	○	○	○
5. How often have you concealed or hidden your sexual behavior from others?	○	○	○	○	○
6. How often have you been unable to control your sexual feelings?	○	○	○	○	○
7. How often have you made pledges or promises to change or alter your sexual behavior?	○	○	○	○	○
8. How often have your sexual thoughts or behaviors interfered with the formation of friendships?	○	○	○	○	○
9. How often have you developed excuses and reasons to justify your sexual behavior?	○	○	○	○	○
10. How often have you missed opportunities for productive and enhancing activities because of your sexual activity?	○	○	○	○	○
11. How often have your sexual activities caused financial problems for you?	○	○	○	○	○

12. How often have you felt emotionally distant when you were engaging in sex with others?	○	○	○	○	○
13. How often have you had sex or masturbated more than you wanted to?	○	○	○	○	○

French Version

Encerclez la réponse qui décrit le mieux votre réponse.

	1 Jamais	2 Occasionnellement	3 Souvent	4 Fréquemment	5 Très fréquemment
1. Avec quelle fréquence avez-vous eu des difficultés à contrôler vos pulsions sexuelles?	○	○	○	○	○
2. Vous êtes-vous senti incapable de contrôler votre comportement sexuel?	○	○	○	○	○
3. Avec quelle fréquence avez-vous eu recours au sexe pour faire face à des soucis ou à des problèmes dans votre vie?	○	○	○	○	○
4. Avec quelle fréquence vous êtes-vous senti coupable ou honteux de certains aspects de votre comportement sexuel?	○	○	○	○	○
5. Avec quelle fréquence avez-vous dissimulé ou caché votre comportement sexuel aux autres?	○	○	○	○	○
6. Avec quelle fréquence avez-vous été incapable de contrôler votre désir sexuel?	○	○	○	○	○
7. Avec quelle fréquence vous êtes-vous engagé ou avez-vous promis de changer ou de modifier votre comportement sexuel?	○	○	○	○	○
8. Avec quelle fréquence vos pensées ou comportements sexuels ont-ils interféré avec la formation de relations amicales?	○	○	○	○	○
9. Avec quelle fréquence avez-vous mis en place des prétextes et des raisons pour justifier votre comportement sexuel?	○	○	○	○	○
10. Avec quelle fréquence avez-vous manqué des occasions de réaliser ou d'améliorer une activité à cause de votre activité sexuelle?	○	○	○	○	○
11. Avec quelle fréquence vos activités sexuelles vous ont-elles causé des problèmes financiers?	○	○	○	○	○
12. Avec quelle fréquence vous êtes-vous senti distant émotionnellement au cours d'une relation sexuelle avec d'autres?	○	○	○	○	○
13. Avec quelle fréquence avez-vous eu des relations sexuelles ou vous êtes-vous masturbé plus que vous ne le vouliez?	○	○	○	○	○

Spanish Version

Circule la respuesta que más aplique.

	1 Nunca	2 Rara Vez	3 Ocasionalmente	4 Frecuentemente	5 Muy Frecuentemente
1. ¿Con qué frecuencia ha tenido usted dificultad en controlar sus impulsos sexuales?	○	○	○	○	○
2. ¿Se ha sentido usted incapaz de controlar su comportamiento sexual?	○	○	○	○	○
3. ¿Con qué frecuencia ha usado usted el sexo para tratar sus preocupaciones o problemas?	○	○	○	○	○
4. ¿Con qué frecuencia se ha sentido usted culpable o avergonzado acerca de los aspectos por su comportamiento sexual?	○	○	○	○	○

5.	¿Con qué frecuencia ha ocultado usted su comportamiento sexual a otros?	○	○	○	○	○
6.	¿Con qué frecuencia se ha sentido usted incapaz de controlar sus sentimientos sexuales?	○	○	○	○	○
7.	¿Con qué frecuencia ha hecho usted compromisos o promesas de cambiar o de alterar su comportamiento sexual?	○	○	○	○	○
8.	¿Con qué frecuencia sus pensamientos o comportamientos sexuales han interferido con la formación de amistades?	○	○	○	○	○
9.	¿Con qué frecuencia ha inventado usted excusas y razones para justificar su comportamiento sexual?	○	○	○	○	○
10.	¿Con qué frecuencia ha perdido usted la oportunidad para hacer actividades productivas debido a su actividad sexual?	○	○	○	○	○
11.	¿Con qué frecuencia su actividad sexual le ha causado a usted problemas financieros?	○	○	○	○	○
12.	¿Con qué frecuencia se ha sentido emocionalmente distante cuando ha tenido sexo con otros?	○	○	○	○	○
13.	¿Con qué frecuencia ha tenido sexo o se ha masturbado más de lo que usted ha querido?	○	○	○	○	○

Swedish Version

Ringa in det svar som stämmer in bäst på dig.

		1 Aldrig	2 Sällan	3 Ibland	4 Ofta	5 Väldigt ofta
1.	Hur ofta har du haft svårt att kontrollera dina sexuella begär?	○	○	○	○	○
2.	Har du upplevt att det är omöjligt att kontrollera ditt sexuella beteende?	○	○	○	○	○
3.	Hur ofta har du använt sex för att handskas med bekymmer och problem i livet?	○	○	○	○	○
4.	Hur ofta har du upplevt skuld och skam över delar av ditt sexuella beteende?	○	○	○	○	○
5.	Hur ofta har du dolt eller hållit ditt sexuella beteende hemligt för andra?	○	○	○	○	○
6.	Hur ofta har du inte kunnat kontrollera dina sexuella känslor?	○	○	○	○	○
7.	Hur ofta har du avlagt löften om att förändra ditt sexuella beteende?	○	○	○	○	○
8.	Hur ofta har dina sexuella tankar eller ditt sexuella beteende ställt till problem i stiftandet av vänskapsrelationer?	○	○	○	○	○
9.	Hur ofta har du formulerat ursäkter och bortförklaringar för att förklara ditt sexuella beteende?	○	○	○	○	○
10.	Hur ofta har du gått miste om tillfällen att utföra produktiva och givande aktiviteter på grund av dina sexuella aktiviteter?	○	○	○	○	○
11.	Hur ofta har dina sexuella aktiviteter försatt dig i ekonomiska svårigheter?	○	○	○	○	○
12.	Hur ofta har du känt dig känslomässigt frånvarande när du har haft sex med andra?	○	○	○	○	○
13.	Hur ofta har du haft sex eller onanerat mer än du velat?	○	○	○	○	○

Bergen–Yale Sex Addiction Scale

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The 6-item Bergen–Yale Sex Addiction Scale (BYSAS; Andreassen, Pallesen, Griffiths, Torsheim, & Sinha, 2018) assesses sex addiction via six dimensions of addiction (i.e., salience, tolerance, mood modification, withdrawal, relapse, and conflict). These six dimensions describe the main components of behavioral addictions on the basis of Griffiths's (2005) addiction components model.

Development

As a theoretical framework, the well-established addiction components model (Griffiths, 2005) was applied to assess sex addiction. First, previous scales assessing other types of behavioral addiction that had applied the addiction components model (e.g., Andreassen, Torsheim, Brunborg, & Pallesen, 2012a; Andreassen, Griffiths, Hetland, & Pallesen, 2012b; Andreassen et al., 2015; Terry, Szabo, & Griffiths, 2004) were reviewed and the items of these scales were considered as a basis of the items of the BYSAS. One item was created for each single criterion. More specifically, the criteria included items relating to salience/craving (i.e., preoccupation with sex/masturbation), mood modification (i.e., sex/masturbation improves mood), tolerance (i.e., more sex/masturbation is required in order to be satisfied), withdrawal symptoms (i.e., reduction or preclusion from sex/masturbation create restlessness and negative feelings), conflict/problems (i.e., sex/masturbation creates conflicts and causes some kind of problem), and relapse/loss of control (i.e., return to old sex/masturbation patterns after a period of control or absence). The specific wording of the items and the response alternatives were based on the wording and response alternatives used in scales assessing other behavioral addictions (e.g., Andreassen et al., 2012a, 2012b, 2015).

Using a cross-sectional survey, the BYSAS was administered to a broad national sample of 23,533 Norwegian adults (aged 16–88 years; mean [± *SD*] age = 35.8 ± 13.3 years), together with validated measures of the Big Five personality traits (i.e., extroversion, agreeableness, neuroticism, conscientiousness, intellect/imagination) using the Mini-International Personality Item Pool (Donnellan, Oswald, Baird, & Lucas, 2006), narcissism using the Narcissistic Personality Inventory—16 (Ames, Rose, & Anderson, 2006), self-esteem using the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and a measure of sexual addictive behavior using the sex subscale of the shorter PROMIS Questionnaire (Christo, Jones, Haylett et al., 2003), hereafter referred to as the SPQ-S.

The dimensionality of the BYSAS was tested through a combination of exploratory (EFA) and confirmatory item factor analysis (CFA), conducted separately on the random split of the full sample. The objective of the exploratory analysis was to test the overall structure of the included items, with a particular focus on detecting deviations from the expected unidimensional structure. The objective of the CFA was to assess the goodness of fit of the unidimensional measurement model for the BYSAS. In line with the findings from the EFA which demonstrated a one-factor model, the CFA indicated an RMSEA of .041 [90% CI = .033, .051], a CFI of .998, and a TLI of .996, indicating high goodness of fit between the one-factor model and the data. To test invariance, differential item functioning (DIF) across gender and age groups was examined using a constrained stepdown approach (Chalmers, 2012). The BYSAS satisfied the assumptions of *partial scalar equivalence* across gender and age groups.

Response mode and timing

The BYSAS can be completed using paper-and-pencil or online in approximately 1–2 minutes. The time frame concerns the past year using a 5-point Likert response format: 0 (*very rarely*), 1 (*rarely*), 2 (*sometimes*), 3 (*often*), and 4 (*very often*) yielding a composite BYSAS score ranging from 0 to 24.

Scoring

In order to be operationally classed as a "sex addict," the symptoms have to have been present at a specific level/magnitude (defined as scoring at least 3 [*often*] or 4 [*very often*]). This is in line with the way cut-offs have been operationalized for other scales assessing behavioral addictions (e.g., Andreassen et al., 2012b; Lemmens et al., 2009). In addition, a specific number of criteria (often more than half) have to be endorsed (here "*often*"

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or "*very often*") to be classed as an addiction (American Psychiatric Association, 2013). Here, at least four of the six BYSAS items had be endorsed in order to regard the participant as a sex addict.

Reliability

The Cronbach's alpha for the BYSAS was .83, and the corrected item-total correlation coefficients for the six items were .69 (salience/craving), .74 (tolerance), .62 (mood modification), .57 (relapse/loss of control), .66 (withdrawal symptoms), and .42 (conflict/problems; Andreassen et al., 2018).

Validity

The correlation coefficient between the BYSAS's composite score and the sex subscale of the SPQ-S was .52 (Andreassen et al., 2018). Both of the scales demonstrated similar correlational patterns with other variables examined. The zero-order correlation coefficients between study variables ranged from –.53 (between self-esteem and neuroticism) to .52 (between the BYSAS and the SPQ-S; see Andreassen et al., 2018 for the complete correlation matrix). In addition, this large-scale study found that sex addiction scores were associated with higher scores on extroversion, neuroticism, intellect/imagination, and narcissism, and lower scores on conscientiousness, agreeableness, and self-esteem. Sex addiction problems were also more prevalent among men than women, and more prevalent among those who were single, of younger age, and with higher education.

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Exhibit

Bergen–Yale Sex Addiction Scale

Below are some questions about your relationship to sex/masturbation. (Sex here means different sexual fantasies, urges and behaviors such as masturbation, pornography, sexual activities with consenting adults, cybersex, telephone sex, strip clubs, and the like.) Choose the response alternative for each question that best describes you.

How often during the past year have you…

	0 Very rarely	1 Rarely	2 Sometimes	3 Often	4 Very often
1. Spent a lot of time thinking about sex/masturbation or planned sex?	○	○	○	○	○
2. Felt an urge to masturbate/have sex more and more?	○	○	○	○	○
3. Used sex/masturbation in order to forget about personal problems?	○	○	○	○	○

4. Tried to cut down on sex/masturbation without success?	○	○	○	○	○
5. Become restless or troubled if you have been prohibited from sex/masturbation?	○	○	○	○	○
6. Had so much sex that it has had a negative impact on your private relationships, economy, health, and/or job/studies?	○	○	○	○	○

Sexual Compulsivity Scale

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The Sexual Compulsivity Scale was designed to serve as a brief psychometric instrument to assist in the assessment of insistent, intrusive, and uncontrolled sexual thoughts and behaviors. Sexual compulsivity is conceptually and clinically similar to sexual addiction. Clinically, sexually compulsive individuals may present with an array of social problems that stem from their sexual preoccupation and conduct, including disturbances in their interpersonal relationships, occupation, and other facets of daily living. Sexual compulsivity can lead to sexual assault and other criminal behavior, especially when the compulsivity occurs in the context of a paraphilia; however, the Sexual Compulsivity Scale is not intended to detect paraphilias. Most available research has examined sexual compulsivity as a correlate of risks for sexually transmitted infections, including HIV/AIDS. The scale content concentrates on sexual preoccupations rather than acting as an indicator of overt sexual behaviors.

Development

The Sexual Compulsivity Scale was originally derived from self-descriptive statements contained in a brochure advertising a sexual addiction support group (CompCare, 1987). The brochure stated that a person should contact the group "if your sexual appetite has gotten in the way of your relationships . . . or if your sexual thoughts and behaviors are causing problems in your life . . . or if your desires to have sex have disrupted your daily life . . ." We therefore extracted self-identifying affirmations from the brochure and framed them as items written in the first person. The scale consists of 10 items that were pilot-tested with men and women in community samples (Kalichman et al., 1994). Items were refined following community feedback. The scale was developed for use with men and women and has shown utility with adults of all ages.

Response Mode and Timing

The 10-item Sexual Compulsivity Scale requires less than 5 minutes to self-administer or interview-administer. Responses are given on a 4-point scale: 1 (*Not at all Like Me*), 2 (*Slightly Like Me*), 3 (*Mainly Like Me*), and 4 (*Very Much Like Me*).

Scoring

The scale does not have formally developed sub-scales; however, factor analysis has shown two principal components to the scale: (a) uncontrolled thoughts and behaviors and (b) social and interpersonal problems and disruptions. The scale is scored by summing the items or by taking the mean response (sum of items/10). There are no reverse-scored items.

Reliability

The Sexual Compulsivity Scale has demonstrated excellent internal consistency across several diverse populations including male (α = .77) and female (α = .81) college students (Dodge, Reece, Cole, & Sandfort, 2004), community samples of HIV-positive men and women (α = .89; Kalichman & Rompa, 1995), gay and bisexual men (αs are in range .86–.90; Dodge et al., 2008; Kalichman et al., 1994; Parsons & Bimbi, 2007), young adults in Croatia (α = .87; Štulhofer, Buško, & Landripet, 2010), and patients seeking help for hypersexuality (α = .79; Reid, Carpenter, Spackman, & Willes, 2008). Item-total correlations range from .49 to .73, with no single item substantially reducing or improving the internal consistency when deleted from the total. The scale has also demonstrated acceptable time stability

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over 2 weeks (r = .95; Kalichman & Rompa, 1995) and 3 months (r = .64; Kalichman et al., 1994).

Validity

Studies have demonstrated evidence for the construct validity of the Sexual Compulsivity Scale. Kalichman and colleagues (Kalichman et al., 1994; Kalichman and Rompa, 1995) found the scale to correlate with numbers of sexual partners (r = .21), lower intentions to reduce sexual risks (r = –.35), lower self-esteem (r = –.35), and lower sexual control (r = –.61). Sexually transmitted infection clinic patients who score higher on the scale report greater numbers of sex partners, greater numbers of one-time sex partners, and greater rates of sexual acts (Kalichman & Cain, 2004). Other researchers have shown that Sexual Compulsivity Scale scores predict Internet use for sexual content. For example, people who score higher on the scale spend more time online pursuing sexual partners than individuals who score lower (Cooper, Sherer, Boies, & Gordon, 1999). Dodge et al. (2008) found that gay and bisexual men who score higher on the scale are more likely to seek sex partners on the Internet as well as in anonymous sexual exchange venues and clubs. Demonstrating discriminant validity, patients who seek help for hypersexuality score more than a standard deviation higher on the Sexual Compulsivity Scale than nonclinical samples (Reid et al., 2008). Discriminant validity is also supported by researchers who have demonstrated that gay and bisexual men who engage in high-risk sexual behavior fully understanding their risks for HIV/AIDS score higher on the scale (Halkitis et al., 2005; Parsons & Bimbi, 2007). For additional information, see Kalichman & Rompa (2001).

Other Information

The Sexual Compulsivity Scale is in the public domain and available for open use. National Institute of Mental Health (NIMH) grant R01-MH71164 supported preparation of the chapter.

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Exhibit

Sexual Compulsivity Scale

A number of statements that some people have used to describe themselves are given below. Read each statement and then select the number to show how well you believe the statement describes you.

	1 Not like me	2 Slightly like me	3 Mainly like me	4 Very much like me
1. My sexual appetite has gotten in the way of my relationships.	○	○	○	○
2. My sexual thoughts and behaviors are causing problems in my life.	○	○	○	○

3.	My desires to have sex have disrupted my daily life.	○	○	○	○
4.	I sometimes fail to meet my commitments and. responsibilities because of my sexual behaviors.	○	○	○	○
5.	I sometimes get so horny I could lose control.	○	○	○	○
6.	I find myself thinking about sex while at work.	○	○	○	○
7.	I feel that my sexual thoughts and feelings are stronger than I am.	○	○	○	○
8.	I have to struggle to control my sexual thoughts and behavior.	○	○	○	○
9.	I think about sex more than I would like to.	○	○	○	○
10.	It has been difficult for me to find sex partners who desire having sex as much as I want to.	○	○	○	○

The Hypersexual Disorder Screening Inventory

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The Hypersexual Disorder Screening Inventory (HDSI) was proposed by the American Psychiatric Association's taskforce as a clinical screening instrument for inclusion in the 5th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) for the identification of hypersexuality (Kafka, 2010, 2013, 2014; Parsons et al., 2013). It consists of a total of seven items split into two sections. Respondents report based on the prior 6 months. Section A consists of five items measuring recurrent and intense sexual fantasies, urges, and behaviors, and Section B contains two items measuring distress and impairment as a result of these fantasies, urges, and behaviors.

Development

Hypersexual disorder (HD) was a proposed construct to be included in the DSM-5 as a non-paraphilic sexual disorder for the clinical diagnosis of excessive sexual thoughts and behaviors accompanied by clinically significant distress (Kafka, 2010, 2013, 2014). HD is defined as "a repetitive and intense preoccupation with sexual fantasies, urges, and behaviors, leading to adverse consequences and clinically significant distress or impairment in social, occupational, or other important areas of functioning" (Reid, Garos, & Carpenter, 2011, p. 30; also see Kaplan and Krueger, 2010, for a review on the various HD subtypes). Although the board of the American Psychiatric Association ultimately decided not to include HD in the DSM-5, the Hypersexual Disorder Screening Inventory (HDSI) was the measure proposed for the clinical screening of HD by the DSM-5 work group. Reid and colleagues have demonstrated the validity and inter-rater reliability of the HD syndrome within a clinical sample utilizing a clinician-administered diagnostic interview (Reid et al., 2012).

Parsons et al. (2013) conducted a psychometric analysis of the HDSI, including an investigation of its underlying dimensional structure and reliability utilizing item response theory (IRT) modeling, and an examination of its polythetic scoring criteria in comparison to a standard dimensionally based cutoff score. These analyses were conducted using data from a sample of highly sexually active gay and bisexual men recruited in New York City

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($N = 202$). Highly sexually active was operationally defined as having more than 9 sex partners in the prior 90 days (participants in the sample reported a median of 21 partners in the prior 90 days). Although frequent sexual partnerships are not necessarily problematic, and the definitions of a "healthy" sexual appetite differs cross culturally (and is often based in morality), there is some overlap between number of partners and indicators of HD, thus we chose to use a sample of highly sexually active individuals with the expectation that some would indicate HD symptomology.

Response Mode and Timing

Respondents reported based on the prior 6 months. Section A of the HDSI consists of five items measuring recurrent and intense sexual fantasies, urges, and behaviors. Section B contains two items measuring distress and impairment as a result of these fantasies, urges, and behaviors. For each of the two blocks, which are displayed separately, participants are instructed to, "*Please rate how often each item is true or how accurately it describes your sexual behavior during the last 6 months*." The measure can be self-administered and completed in 2–5 minutes.

Scoring

Responses are provided on an escalating scale with the following response options: 0 (*Never true*), 1 (*Rarely true*), 2 (*Sometimes true*), 3 (*Often true*), and 4 (*Almost always true*). There are two methods of scoring. First, the responses to all seven items can be summed to provide a dimensional severity index score ranging from 0 to 28. No items are reverse coded. No threshold for the continuous severity index has been proposed as being diagnostically informative for the scale. Second, polythetic diagnostic criteria were proposed by the original authors consistent with how symptom clusters are generally coded within the *DSM*. Specifically, these criteria require recoding responses into dichotomies whereby responses of 3 or 4 are coded as endorsement of each symptom and all lesser responses are coded as non-endorsement. Following the recoding, a preliminary positive screening for HD has been operationalized as the endorsement of at least four items in Section A and at least one item in Section B.

Reliability

Item response theory (IRT) analyses conducted by Parsons et al. (2013) utilized a unidimensional structure to allow for a test of the item information (i.e., reliability) of each individual item in capturing the underlying latent construct of HD severity based on polytomous responses rather than dichotomous presence/absence of each symptom. Analyses suggested that items A2, A3, and B2 provided the most reliable information regarding HD severity; item A1 provided the least information, but was also the only item to reliably distinguish individuals at the extreme low end of HD severity, thus suggesting it captures unique information not provided by other items and is useful to retain. The scale as a whole measured HD with at least 80 percent reliability across virtually the entire continuum of scores, and measured with at least 90 percent reliability from –1.2 to 1.1 standard deviations from the mean (corresponding in this sample to overall severity index scores ranging from 6 to 22). Cronbach's alpha, a measure of internal consistency, was calculated to be .88 for the overall severity index.

Validity

Although two distinct clusters of symptoms were proposed as defined above, factor analyses conducted by Parsons et al. (2013) suggested a single factor was sufficient to explain the variability across items. However, this one-factor model did not reach acceptable levels of fit until residual variances were allowed to correlate for items A2 with A3 and B1 with B2. These residual variances suggest that these items share variability with each other not accounted for by the latent factor, and suggest that if more items of the same theme as A2 and A3 or of B1 and B2 were included, these may emerge as distinct factors. As such, considering items B1 and B2 to tap into a distinct symptom cluster may be valid and future research is needed to further test this.

Receiver operating curve (ROC) analyses were conducted by Parsons et al. (2013) to determine whether there was a point on the overall severity index that corresponded well enough to the HD screening result using polythetic scoring criteria that a simple cutoff might be proposed in lieu of the more complicated polythetic scoring criteria. These analyses did suggest that a score of 20 on the continuous severity index corresponded very highly (sensitivity = 95% and specificity = 96%) to the polythetic scoring criteria, and might be used in place of these more complicated criteria, particularly when delivering the survey in resource-poor settings.

Among this sample at high risk for HD, only 41 of the 202 men (20.3%) screened positive for HD using the polythetic scoring criteria, suggesting that the screening measure does not have a tendency to over-classify men as having HD. The prevalence would be expected to be much lower in populations not pre-selected for above average levels of sexual behavior. In unpublished data from a nationwide sample of HIV-negative gay and bisexual men from across the U.S. (Grov et al., 2016), only 21 of 1,071 (2.0%) screened positive for HD using the polythetic scoring criteria of the HDSI.

Later analyses have been conducted that suggests the HDSI has good convergent validity.

In analyses of highly sexually active gay and bisexual men, the HDSI correlated with the Sexual Compulsivity Scale at .82 (Pachankis et al., 2015). The HDSI has also been shown to be associated with more problematic levels of sexual excitation and sexual inhibition (Parsons, Rendina, Ventuneac, Moody, & Grov, 2016).

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Exhibit

The Hypersexual Disorder Screening Inventory (HDSI)

Please rate how often each item is true or how accurately it describes your sexual behaviour, during the last 6 months.

	0 Never true	1 Rarely true	2 Sometimes true	3 Often true	4 Almost always true
1. I have spent a great amount of time consumed by sexual fantasies and urges as well as planning for and engaging in sexual behavior.	○	○	○	○	○
2. I have used sexual fantasies and sexual behavior to cope with difficult feelings (for example, worry, sadness, boredom, frustration, guilt, or shame).	○	○	○	○	○
3. I have used sexual fantasies and sexual behavior to avoid, put off, or cope with stresses and other difficult problems or responsibilities in my life.	○	○	○	○	○
4. I have tried to reduce or control the frequency of sexual fantasies, urges, and behavior but I have not been very successful.	○	○	○	○	○
5. I have continued to engage in risky sexual behavior that could or has caused injury, illness, or emotional damage to myself, my sexual partner(s), or a significant relationship.	○	○	○	○	○

Please rate how often each item is true or how accurately it describes your sexual behaviour, during the last 6 months.

	0 Never true	1 Rarely true	2 Sometimes true	3 Often true	4 Almost always true
1. Frequent and intense sexual fantasies, urges and behavior have made me feel very upset or bad about myself (for example, feelings of shame, guilt, sadness, worry, or disgust) or I tried to keep my sexual behavior a secret.	○	○	○	○	○
2. Frequent and intense sexual fantasies, urges and behavior have caused significant problems for me in personal, social, work, or other important areas of my life.	○	○	○	○	○

11 Condoms

The Condom Barriers Scale—Revised for Use with Young Black Men Who Have Sex with Men

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Men who have sex with men (MSM) represent the highest prevalence and incidence rates of human immunodeficiency virus (HIV) in the United States (Centers for Disease Control and Prevention, 2012). Within this group, young Black MSM (YBMSM) account for the largest incidence rates, with 25 percent of YBMSM acquiring HIV by age 25 (Black AIDS Institute, 2012; Centers for Disease Control and Prevention, 2012). While the availability of preexposure prophylaxis (PrEP) has recently become a popular prevention strategy, correct and consistent condom use remains an effective method of preventing the transmission of HIV (Crosby, 2013; Crosby & Cates, 2012; Crosby, Geter, DiClemente, & Salazar, 2014). To promote the correct and consistent use of condoms for YBMSM, it is important to understand the barriers to achieving this goal. Yet, research has not determined the reliability or validity of measures designed to assess condom barriers as perceived and experienced by YBMSM. Therefore, the Condom Barriers Scale (CBS; St. Lawrence et al., 1999) was adapted and evaluated for the use of YBMSM (Crosby et al., 2017).

Development

The Condom Barriers Scale (CBS) was originally developed as a 26-item measure for heterosexuals, obtaining strong evidence of reliability and validity (Crosby et al., 2003; St. Lawrence et al., 1999). To assess the measure with YBMSM, an abbreviated and slightly altered 14 items of CBS were used. A 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) was used to score each item, with higher scores representing greater barriers to condom use. The adapted survey assesses barriers to condom using three subscales: *partner-related barriers* (5 items, Items 1–5), *sensation-related barriers* (5 items, Items 6–10) and *motivation-related barriers* (4 items, Items 11–14).

Response Mode and Timing

The items can be completed by paper and pencil or in a computer-assisted, self-administered format. They can typically be completed in less than five minutes.

Scoring

Respondents complete the scale with responses ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The scale can be used in its entirety, or any of the three subscales can be used. Scores are summed, but not divided by the number of items, thus allowing for a wider range of dispersion.

Reliability

The partner-related subscale produced a Cronbach's alpha of .73, the sensation-related scale produced an alpha of .81, and the motivation-related subscale produced an alpha of .70 among the sample of 600 YBMSM (Crosby et al., 2017).

Validity

Evidence of criteria validity was reported by Crosby et al. (2017). Significant associations between the three subscales

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and two outcome measures of condomless anal sex were found; as well, two of the three subscales were significantly associated with condomless oral sex. Because the distributions for each subscale were markedly skewed, each was dichotomized using a median split. Dichotomized subscales were significantly associated with reporting any condomless insertive anal sex (all *p*s < .001) and any condomless receptive anal sex (all *p*s < .001). Of interest, despite the violations of normality for the frequency measure of condomless anal sex, each subscale was significantly associated with these measures when preserved at a continuous level.

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Exhibit

The Condom Barriers Scale—Revised for Use with Young Black Men Who Have Sex with Men

Partner-Related Items

The following statements are about condoms. Please indicate how much you agree or disagree with each statement by choosing the appropriate number.

	1 Strongly disagree	2 Somewhat disagree	3 Neither agree nor disagree	4 Somewhat agree	5 Strongly agree
1. I won't use a condom unless my partner asks me to do so.	○	○	○	○	○
2. If a guy asked me to use a condom, I would think that he didn't trust me.	○	○	○	○	○
3. If a guy asked me to use a condom, he would think I was accusing him of cheating.	○	○	○	○	○
4. If I asked my male sex partner to use a condom, he might think I was cheating.	○	○	○	○	○
5. I get turned off when my partner suggests that we use a condom.	○	○	○	○	○

Sensation-Related Items

The following statements are about condoms. Please indicate how much you agree or disagree with each statement by choosing the appropriate number.

	1 Strongly disagree	2 Somewhat disagree	3 Neither agree nor disagree	4 Somewhat agree	5 Strongly agree
6. Condoms rub and make you feel sore.	○	○	○	○	○
7. Condoms don't feel good.	○	○	○	○	○

8. Condoms feel unnatural.	○	○	○	○	○
9. Condoms reduce the intensity of my orgasm.	○	○	○	○	○
10. Condoms don't fit right.	○	○	○	○	○

Motivation-Related Items

The following statements are about condoms. Please indicate how much you agree or disagree with each statement by choosing the appropriate number.

	1 Strongly disagree	2 Somewhat disagree	3 Neither agree nor disagree	4 Somewhat agree	5 Strongly agree
11. Condoms spoil the mood.	○	○	○	○	○
12. I would get angry if my partner asked that we use a condom.	○	○	○	○	○
13. I feel closer to my partner without a condom.	○	○	○	○	○
14. It is insulting to me when my partner asks if we can use a condom.	○	○	○	○	○

Condom Use Errors/Problems Survey

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Consistent use of the male latex condom is an effective method of reducing the risk of transmitting and acquiring many sexually transmitted infections (STIs), including HIV and unintended pregnancy (Centers for Disease Control and Prevention, 2009); however, consistently using condoms is not sufficient—condoms must also be used correctly (Centers for Disease Control and Prevention, 2009; Steiner, Cates, & Warner, 1999). Thus, identifying prevalent user errors and problems can be a valuable starting point toward the goal of promoting improved quality of condom use.

The Condom Use Errors/Problems Survey (CUES) is a comprehensive assessment of errors and problems that people may experience when using male condoms that may lead to condom failures. Errors such as forms of incorrect use and problems like breakage or slippage, erection difficulties, and discomfort are assessed. There are two versions of the CUES: (a) Condom Use Errors/Problems—Men (M-CUES), for men who placed the condom on themselves, and (b) Condom Use Errors/Problems—Women (W-CUES), for women who placed condoms on their male partners.

The CUES assesses the last three times a condom was used during the past three months as the recall period. The CUES has also been used to assess use errors and problems the last time the condom was used or during all occasions of condom use during a specified time period. We used a limited event and time frame because accuracy of recall is considered vital (Graham et al., 2003); however, researchers are encouraged to adopt a recall period that reflects their study goals and objectives.

The survey can be used to measure condom use errors and problems during either penile–vaginal or penile–anal sexual intercourse, as a blank space is provided before the word "intercourse" so that researchers can tailor the measure to assess the specific behavior of interest.

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Development

The questionnaire has been refined through use in several studies involving samples of adolescent and adult men and women recruited from STI clinics, college students, rural men from a random telephone sampling, and participants from an online survey (e.g., Graham et al., 2006; Sanders, Milhausen, Crosby, Graham, & Yarber, 2009; Yarber, Graham, Sanders, & Crosby, 2004; Yarber et al., 2005). The CUES has been used in recent research among populations of young men who have sex with men (Crosby, Milhausen, Sanders, Graham, & Yarber, 2014; Crosby et al., 2015; Crosby et al., 2016; Hernández-Romieu, Siegler, Sullivan, Crosby, & Rosenberg, 2014; Mustanki et al., 2017) and young adults (Janssen et al., 2014).

Response Mode and Timing

Respondents indicate whether or not each condom use error or problem occurred during the last three times they used and applied a male condom and, if so, if it occurred on one, two, or three occasions. The survey takes an average of 10 minutes to complete.

Scoring

Although analysis of individual items provides greater insight, summative scores of error items and problem items can be calculated. *Error Items* are 1, 2, 3, 4, 6, 7, 9, 10, and 11. *Problem Items* are 5, 8, 12, 13, 14, 15, and 16. For a recall period based on the last three times a condom was used, the summative error score indicates the total number of times errors were reported (minimum 0, maximum 27 [9 errors × 3 occasions]). Items 1, 3, and 4 are reversed scored such that a *no* response is scored as 3, one occasion scored as 2, two occasions scored as 1, and all three occasions scored as 0. Alternatively, an error occurring during any of the last three occasions or that occurred at least once during a specific time period could be scored a 1 and a correct condom use or no problem is scored as 0 (Milhausen et al., 2009).

Reliability

Behavioral measures such as the CUES do not easily lend themselves to measurements of reliability, as they are not measuring a trait or construct assessed with multiple questions. Instead, the items are designed to measure distinct behavioral experiences. Relative to test-retest, the same person may have different behavioral experiences over time; test-retest assessments may not be highly correlated over time unless the person has the same behavioral experiences. Although it is possible that a person who reports a specific error or problem at "test" may also be inclined to the same error/problem in the future "retest," this has not been evaluated longitudinally with the CUES.

Validity

The survey items have evidence of content and face validity because they were informed by widely cited condom use guidelines (Centers for Disease Control and Prevention, 1998; Warner & Hatcher, 1999). Our studies have found, for example, that respondents who reported previous instruction on correct condom use were found to have lower error scores than those who had not had such instruction, and correlations have been reported between errors and specific problems, such as incomplete use and erection difficulties (Graham et al., 2006) and using sharp objects to open the package and condom breakage (Yarber et al., 2004). Crosby et al. (2015) included a recall period for young Black men who have sex with men limited to the last time a condom was used for anal sex as an insertive partner to improve validity of the scale.

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Exhibit

Condom Use Errors/Problems Survey

Men (M-CUES)

The questionnaire is designed for a man who has used male condoms at least three times in the past three months for _____ *[Researchers choose penile–vaginal (penis in vagina) or penile–anal (penis in rectum/butt)]* intercourse and who put the condom on his penis all of the three times. Thinking about the last three times you (not your partner) put the condom on your penis, indicate whether or not you engaged in the behavior or if the event happened and, if so, how often it occurred.

	No	Yes—I did it on 1 occasion	Yes—I did it on 2 occasions	Yes—I did it on all 3 occasions
1. For the last three times you used a condom for _____ [Researchers choose: penile–vaginal or penile–anal] intercourse, did you check for visible damage before having _____ intercourse?	○	○	○	○
2. For the last three times you used a condom for _____ intercourse, did you put it on the wrong side up and have to flip it over?	○	○	○	○
3. For the last three times you used a condom for _____ intercourse, did you leave space at the tip of the condom when putting it on?	○	○	○	○
4. For the last three times you used a condom for _____ intercourse, did you squeeze the air out after putting it on?	○	○	○	○
5. For the last three times you used a condom for _____ intercourse, did you lose or start to lose your erection while putting it on?	○	○	○	○
6. For the last three times you used a condom for _____ intercourse, did you use a condom without a water-based lubricant such as K-Y jelly or spermicidal cream (meaning the condom did not have lubricant on it and you or your partner did not put any on it)?	○	○	○	○
7. For the last three times you used a condom for _____ intercourse, did you also use an oil-based lubricant, such as Vaseline or baby oil, with the condom?	○	○	○	○

8. For the last three times you used a condom for _____ intercourse, did you lose or start to lose your erection after intercourse had begun while using the condom?	○	○	○	○
9. For the last three times you used a condom for _____ intercourse, did you let it contact sharp jewelry, fingernails, piercings, or teeth anytime before or during _____ intercourse?	○	○	○	○
10. For the last 3 times you used a condom for _____ intercourse, did you start having _____ intercourse without the condom and then put it on later and continued _____ intercourse?	○	○	○	○
11. For the last time you used a condom for _____ intercourse, did you start having intercourse with it on and then take it off and continue having _____ intercourse without it on?	○	○	○	○
12. For the last three times you used a condom for _____ intercourse, did it break during _____ intercourse?	○	○	○	○
13. For the last three times you used a condom for _____ intercourse, did it slip off during _____ intercourse?	○	○	○	○
14. For the last three times you used a condom for _____ intercourse, did it slip off as you were taking your penis out of the _____ [vagina or anus/rectum/butt]?	○	○	○	○
15. For the last three times you used a condom for _____ intercourse, did you have any problems with the way it fit?	○	○	○	○
16. For the last three times you used a condom for _____ intercourse, did you or your partner have any problems with the way it felt?	○	○	○	○

Women (W-CUES)

The questionnaire is designed for a woman who has used a male condom at least three times in the past three months for _____ *[Researchers choose penile–vaginal (penis in vagina) or penile–anal (penis in rectum/butt)]* intercourse and who put the condom on her partner's penis all of the three times. Thinking about the last three times you (not your partner) put the condom on his penis, indicate whether or not you engaged in the behavior or if the event happened and, if so, how often it occurred.

	No	Yes—I did it on 1 occasion	Yes—I did it on 2 occasions	Yes—I did it on all 3 occasions
1. For the last three times you used a condom for _____ [Researchers choose: penile–vaginal or penile–anal] intercourse, did you check for visible damage before having _____ intercourse?	○	○	○	○
2. For the last three times you used a condom for _____ intercourse, did you put it on the wrong side up and have to flip it over?	○	○	○	○
3. For the last three times you used a condom for _____ intercourse, did you leave space at the tip of the condom when putting it on?	○	○	○	○

4. For the last three times you used a condom for _____ intercourse, did you squeeze the air out after putting it on?	○	○	○	○
5. For the last three times you used a condom for _____ intercourse, did your partner lose or start to lose his erection while you were putting it on his penis?	○	○	○	○
6. For the last three times you used a condom for _____ intercourse, did you use a condom without a water-based lubricant such as K-Y jelly or spermicidal cream (meaning the condom did not have lubricant on it and you or your partner did not put any on it)?	○	○	○	○
7. For the last three times you used a condom for _____ intercourse, did you also use an oil-based lubricant, such as Vaseline or baby oil, with the condom?	○	○	○	○
8. For the last three times you used a condom for _____ intercourse, did your partner lose or start to lose his erection after _____ intercourse had begun while using the condom?	○	○	○	○
9. For the last three times you used a condom for _____ intercourse, did you let it contact sharp jewelry, fingernails, piercings, or teeth anytime before or during _____ intercourse?	○	○	○	○
10. For the last three times you used a condom for _____ intercourse, did you start having _____ intercourse without the condom and then put it on later and continued _____ intercourse?	○	○	○	○
11. For the last time you used a condom for _____ intercourse, did you start having intercourse with it on and then take it off and continue having _____ intercourse without it on?	○	○	○	○
12. For the last three times you used a condom for _____ intercourse, did it break during _____ intercourse?	○	○	○	○
13. For the last three times you used a condom for _____ intercourse, did it slip off during _____ intercourse?	○	○	○	○
14. For the last three times you used a condom for _____ intercourse, did it slip off while your partner was taking his penis out of your _____ [vagina or anus/rectum/butt]?	○	○	○	○
15. For the last three times you used a condom for _____ intercourse, did your partner have any problems with the way it fit?	○	○	○	○
16. For the last three times you used a condom for _____ intercourse, did you or your partner have any problems with the way it felt?	○	○	○	○

Correct Condom Use Self-Efficacy Scale

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Consistent and correct male condom use has been noted as one effective method for preventing the transmission of HIV and reducing the risk of other STDs (Centers for Disease Control and Prevention, 2013). Although a number of psychosocial constructs have been associated with condom use, a central construct, from a theoretical and an empirical perspective, has been condom use self-efficacy. Bandura (1994) defined self-efficacy as beliefs about one's capabilities to produce designated levels of performance and suggested that self-efficacy largely determined how individuals feel, think, motivate themselves, and behave. Condom use self-efficacy, therefore, refers to an individual's confidence in the ability to exert control over his or her motivation, behavior, and social environment to use condoms (Forsyth & Carey, 1998).

A number of previous measures of self-efficacy assess knowledge, behavioral intentions, or attitudes, but not an individual's perception about his or her ability to perform specific behaviors (e.g., Goldman & Harlow, 1993; Lux & Petosa, 1994; Schaalma, Kok, & Peters, 1993). Other measures of self-efficacy are limited by their conceptualization of self-efficacy as a stable trait across different contexts (e.g., St. Lawrence, Brasfield, Jefferson, Alleyne, & Shirley, 1994) as opposed to a more domain-specific behavior. Many researchers also have relied on a single-item measure of self-efficacy that may limit the precision of measurement (e.g., Wulfert & Wan, 1993). Therefore, a scale that measures individuals' perceptions of their ability to perform behaviors specific to correct condom use would have utility in public health research.

Development

The Correct Condom Use Self-Efficacy Scale (CCUSS) is a 7-item scale designed to measure an individual's perception of the ease or difficulty with which he or she can apply and use male condoms correctly. This scale emerged from our earlier research on the prevalence and predictors of male condom use errors and problems (e.g., Crosby, Milhausen, Sanders, Graham, & Yarber, 2008; Crosby, Sanders, Yarber, Graham, & Dodge, 2002; Graham et al., 2006; Milhausen et al., 2011; Sanders et al., 2003; Sanders, Milhausen, Crosby, Graham, & Yarber, 2009; Yarber, Graham, Sanders, & Crosby, 2004; Yarber et al., 2005). CCUSS items reflect the condom use errors and problems that might occur before, during, and after sex.

Response Mode and Timing

Respondents are asked how easy or difficult it would be for them to perform various correct condom use tasks. Responses are provided using a scale ranging from 1 (*very difficult*) to 5 (*very easy*).

Scoring

Items are summed such that a higher score indicates greater self-efficacy for correct use of male condoms. The mean score among a sample of 278 adult male clients attending a sexually transmitted infections (STI) clinic was 27.61 (SD = 4.37, range = 8–35; Crosby, Salazar et al., 2008).

Reliability

The scale produced a Cronbach's alpha of .70 among the aforementioned STI clinic sample (Crosby, Salazar et al., 2008). For a sample of young men who have sex with men at a large Midwestern university, the scale produced a Cronbach's alpha of .55 (Emetu et al., 2014).

Validity

Crosby, Salazar et al. (2008) found that greater self-efficacy for correct use of condoms was associated with fewer condom use errors and problems. Hall et al. (2016), in a sample of Australian young adults, found age and gender associated with confidence in correct condom use, with men and those being older than 21 reporting higher confidence.

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Exhibit

Correct Condom Use Self-Efficacy Scale

Please select the number that represents how easy or difficult it would be to do what each question asks. For example, if you thought a behavior in the statement would be very easy, you would select number "5."

	1 Very Difficult	2	3	4	5 Very Easy
1. How easy or difficult would it be for you to find condoms that fit you properly?	○	○	○	○	○
2. How easy or difficult would it be for you to apply condoms correctly?	○	○	○	○	○
3. How easy or difficult would it be for you to keep a condom from drying out during sex?	○	○	○	○	○
4. How easy or difficult would it be for you to keep a condom from breaking during sex?	○	○	○	○	○
5. How easy or difficult would it be for you to keep an erection while using a condom?	○	○	○	○	○
6. How easy or difficult would it be for you to keep a condom on when withdrawing after sex?	○	○	○	○	○
7. How difficult would it be for you to wear a condom from start to finish of sex with your partner?	○	○	○	○	○

The UCLA Multidimensional Condom Attitudes Scale

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The purpose of the UCLA Multidimensional Condom Attitudes Scale (MCAS) is to measure condom attitudes in five independent areas: (1) the *reliability and effectiveness* of condoms, (2) the sexual *pleasure* associated with condom use, (3) the *stigma* associated with people proposing or using condoms, (4) the *embarrassment about negotiating and using* of condoms, and (5) the *embarrassment about purchasing* condoms. The scale can be used with individuals who do and do not have personal experience using condoms.

The 25-item MCAS assesses five independent factors associated with condom use. The MCAS was found to be reliable and valid in three studies using ethnically diverse samples of UCLA undergraduates (Helweg-Larsen & Collins, 1994). As of March 2017, it had been cited 268 times, according to Google Scholar. The scale has been used in 66 of these publications. The scale has been used with a range of populations, such as HIV positive individuals from urban clinics in California (Milam, Richardson, Espinoza & Stoyanoff, 2006), Chinese and Filipina American college women (Lam & Barnhart, 2006), sexually active adult cocaine or heroin users (Rosengard, Anderson, & Stein, 2006), cocaine abusing, opioid-dependent HIV-positive adults (Avants, Warburton, Hawkins, & Margolin, 2000), individuals diagnosed with schizophrenia and mood disorders (Weinhardt, Carey & Carey, 1997), American Indian men who identified as gay/bisexual/two-spirit and heterosexual (Simoni, Walters, Balsam, & Meyers, 2006), HIV-positive Zambian women (Jones, Ross, Weiss, Bhat & Chitalu, 2005), and pregnant & postpartum adolescents and their partners (Kershaw et al., 2012; Reid et al., 2013). Furthermore, the MCAS has been translated to Spanish (DeSouza, Madrigal, & Millán, 1999; Lechuga & Wiebe, 2009; Unger & Molina, 1999), Japanese (Kaneko, 2007), Urdu (Agha & Beaudoin, 2012; Agha & Meekers, 2010; Beaudoin, Chen & Agha, 2016) and various Zambian languages such as Bemba, Nyanja, and Nsenga (Jones et al., 2005). Overall, the body of research using the MCAS shows that it has been a reliable and valid measure of condom attitudes in a wide range of participants.

Response Mode and Timing

Participants answer the 25 items using either a 7-point or a 5-point scale from *strongly disagree* to *strongly agree*. It should take 5–10 minutes to complete the scale depending on reading level and speed.

We found that the five dimensions of the MCAS cannot meaningfully be summed to generate a single global score because the factors are independent. The statistical independence of the five factors was established via factor analyses and confirmatory factor analysis in structural equation modeling which showed that a model with five independent factors was superior in fitting the data compared to a unidimensional model (all 25 questions averaged). This factor structure has been replicated (Starosta, Berghoff, & Earleywine, 2015). Thus, it is important that the five factors are scored separately. If researchers do not have room to use all 25 questions, they may select one or several of the factors that they are particularly interested in and use all five questions in that factor. Another option is to select a few questions from each of the five factors; Table 1 in Helweg-Larsen & Collins (1994) shows factor loadings (separately for men and women) that can guide researchers in the selection of questions. Our research shows that important information is lost if questions are added together across factors.

Scoring

Our research also demonstrated the importance of examining condom attitudes separately for men and women. First, results indicated gender differences on several of the five factors; compared to women, men were less embarrassed about purchasing condoms but more concerned about stigma. In a validation study of the MCAS, Starosta et al. (2015) conducted differential item functioning analyses and concluded that three items (16, 19, 22; see Table 1 in Starosta et al., 2015) were problematic from a gender bias perspective. They found that an amended MCAS (without those three items) provided a valid scale with five constructs holding similar meaning for men and women. Second, the MCAS factors showed different patterns of correlations with criterion variables for men and women. For example, women's past condom use was not correlated with any of the five MCAS factors, whereas men's past condom use was correlated with positive attitudes toward pleasure and embarrassment about buying condoms.

Some of the MCAS items are worded negatively (i.e., indicate a negative attitude towards condoms) and the score must therefore be reversed before adding or averaging the scores; higher scores will then indicate more positive condom attitudes.

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MCAS Factors

1. *Reliability and effectiveness* of condoms: Reverse score questions 6 and 14; then add questions 4, 6, 9, 14, and 20.
2. *Pleasure* associated with condoms: Reverse score questions 2, 8, 25; then add questions 2, 8, 15, 19, and 25.
3. *Stigma* associated with condoms: Reverse score questions 3, 13, 18, 22, and 24; then add questions 3, 13, 18, 22, and 24.
4. *Embarrassment about negotiation and use* of condoms: Reverse score questions 1, 7, 16; then add questions 1, 7, 12, 16, and 21.
5. *Embarrassment about purchasing* condoms: Reverse score questions 5, 11, 17, 23; then add questions 5, 10, 11, 17, and 23.

Reliability

We established internal consistency in three independent samples (separately for men and women) using factor analysis and confirmatory factor analysis in structural equation modeling (Helweg-Larsen & Collins, 1994). Acceptable Cronbach's alpha values for each factor have been found in many subsequent studies (e.g., Maistro et al., 2004; Rosengard et al., 2006; Starosta et al., 2015).

Validity

We established construct validity for the MCAS by showing that gender and sexual experience was associated with the five factors of the MCAS (Helweg-Larsen & Collins, 1994). Furthermore, criterion validity was established in that both past and intended condom use were related to the five factors of the MCAS, again showing different patterns for men and women. The MCAS and its factor structure has also been validated in a sample of low-acculturated Hispanic women (Unger & Molina, 1999), among Mexican undergraduate students (DeSouza et al., 1999), and in a large sample of internet-recruited participants (Starosta et al., 2015).

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Exhibit

UCLA Multidimensional Condom Attitudes Scale

Please respond to all questions *even if you are not sexually active* or *have never used* (or had a partner who used) condoms. In such cases indicate how you *think you would feel* in such a situation. Choose a number on the scale below that best represents your feelings about each statement. There are no right or wrong responses to any of these statements.

	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4	5 Slightly Agree	6 Agree	7 Strongly Agree
1. It is really hard to bring up the issue of using condoms to my partner.	○	○	○	○	○	○	○
2. Use of a condom is an interruption of foreplay.	○	○	○	○	○	○	○
3. Women think men who use condoms are jerks.	○	○	○	○	○	○	○
4. Condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases.	○	○	○	○	○	○	○
5. I always feel really uncomfortable when I buy condoms.	○	○	○	○	○	○	○
6. Condoms are unreliable.	○	○	○	○	○	○	○
7. When I suggest using a condom I am almost always embarrassed.	○	○	○	○	○	○	○
8. Condoms ruin the sex act.	○	○	○	○	○	○	○
9. I think condoms are an excellent means of contraception.	○	○	○	○	○	○	○
10. I don't think that buying condoms is awkward.	○	○	○	○	○	○	○
11. It is very embarrassing to buy condoms.	○	○	○	○	○	○	○
12. It is easy to suggest to my partner that we use a condom.	○	○	○	○	○	○	○
13. If a couple is about to have sex and the man suggests using a condom, it is less likely that they will have sex.	○	○	○	○	○	○	○
14. Condoms do not offer reliable protection.	○	○	○	○	○	○	○
15. Condoms are a lot of fun.	○	○	○	○	○	○	○
16. I never know what to say when my partner and I need to talk about condoms or other protection.	○	○	○	○	○	○	○
17. It would be embarrassing to be seen buying condoms in a store.	○	○	○	○	○	○	○
18. People who suggest condom use are a little bit geeky.	○	○	○	○	○	○	○
19. The use of condoms can make sex more stimulating	○	○	○	○	○	○	○
20. Condoms are an effective method of birth control.	○	○	○	○	○	○	○
21. I'm comfortable talking about condoms with my partner.	○	○	○	○	○	○	○
22. Men who suggest using a condom are really boring.	○	○	○	○	○	○	○
23. When I need condoms, I often dread having to get them.	○	○	○	○	○	○	○
24. A woman who suggests using a condom does not trust her partner.	○	○	○	○	○	○	○
25. Condoms are uncomfortable for both parties.	○	○	○	○	○	○	○

12 Desire and Interest

The Sexual Want and Get Discrepancy Measure

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Sexual pleasure, satisfaction, and discrepancies between levels of sexual desire or desired frequency of sexual activity have become important areas of focus in sexuality research. This research, however, has largely focused on penile–vaginal intercourse, leaving a void in an understanding of the diversity of sexual behaviors in which individuals and couples desire and engage. Consequently, we developed the Sexual Want and Get Discrepancy (SWAGD) measure to assess discrepancies in desired and actual frequency of a variety of different sexual behaviors. The SWAGD measure can be administered individually or to both/multiple members in a sexual partnership. The current version, described here, consists of a list of 35 sexual activities, with two open options for participants to report additional sexual activities if desired. Data collected via the measure may enable researchers and practitioners to better tailor their sexual health promotion interventions, focusing on positive sexual health.

Development

We developed the SWAGD measure using multiple methods (both qualitative and quantitative) and data collection phases. First, to construct the measure, we conducted individual interviews with and obtained feedback from 30 heterosexually identified, college-attending women between the ages of 18–25 years at a university in the southeastern United States. Second, to assess face and content validity, we solicited feedback by means of review by three sexuality experts. The initial measure consisted of 24 different sexual behaviors, in which women reported that people their age engage. Third, for initial testing, we administered the preliminary measure to a sample of heterosexually identified, U.S. college-attending women between the ages of 18 and 25 (Sample 1, $N = 469$; Blunt, 2012). Fourth, we administered the measure to a second sample of college-attending women ages 18–25 years at a different U.S.-based university (Sample 2, $N = 217$, 94.8% heterosexual). Based on findings from this data collection and analysis, we added one additional item to the measure, bringing the number of behaviors to 25. Fifth, we administered the measure to another sample of individuals not restricted by age or geographic location (Sample 3, $N = 442$, 50% ages 18–25 years, 64.7% female; 63.7% heterosexual, 14.5% bisexual, 7.4% gay/lesbian). We then conducted a focus group ($N = 5$) with members of the lesbian, gay, bisexual, and transgender (LGBT) community who identified as female, transgender, or genderqueer to solicit feedback on making the measure more applicable for use with this priority population. Next, we further refined the measure based on the feedback received (which resulted in the inclusion of 10 additional items), and pilot tested again with a sample from the general U.S. population ($N = 20$, age range 23–68). We convened a final review by sexuality experts ($N = 6$), and then administered the revised measure to a U.S.-based sample of women diverse in age and sexual orientation (Sample 4, $N = 405$, mean age = 47.75, $SD = 17.38$, 52.6% heterosexual, 30.9% lesbian, 14.3% bisexual). The current version of the measure consists of a list of 35 sexual activities, with two open response options for participants to enter in additional sexual activities, if desired, and to indicate desired and actual frequency of those as well.

Response Mode and Timing

We have administered this measure only via online survey systems (e.g., Qualtrics), and have not tested it via

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other modalities (e.g., paper-and-pencil distribution). Instructions ask participants to think about their current or most recent sexual partner, and to rate how often they WANT to engage in each of the listed activities and then rate how often they GET (or DO engage in) each of the listed activities with that partner. In the initial measure, no specific timeline is provided (e.g., in the past 7 days), however, this could be modified based on the needs of the user.

The sexual activities are presented in a column on the left-hand side with two columns to the right; one which is used to rate how often they WANT to engage in that sexual behavior with their current or most recent sexual partner, the other which is used to rate how often they GET/DO engage in each sexual behavior with their current or most recent sexual partner (See full measure attached). Therefore, respondents are providing two separate ratings for each sexual activity. Both ratings utilize a 5-point Likert-type scale of 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*), and 5 (*always*). The measure typically takes respondents approximately five minutes to complete.

Scoring

Based on the two ratings described above (one for WANT, one for GET), discrepancy scores are calculated by subtracting the GET score for each item from the WANT score for that item (e.g., WANTcuddle – GETcuddle = CuddleDiscrepancy). A discrepancy score of zero for any sexual activity indicates perfect congruency of the desired (WANT) and actual (GET) frequency of that behavior. Discrepancy scores can range from –4 to +4. Positive discrepancy scores indicate that the sexual activity/behavior is *wanted* more than it is received. Negative discrepancy scores indicate that the individual is *engaging* in the behavior more often than it is wanted.

A count of the number of zero scores (perfect congruency) on the 35 behaviors is calculated, which represents the *sexual activity congruency* score. To calculate the *positive sexual activity discrepancy* and the *negative sexual activity discrepancy*, two scoring options are provided. First, to calculate the *positive sexual activity discrepancy* score, all reported positive discrepancies across the 35 behaviors are summed together (for example, if a participant had a discrepancy score of +2 for the cuddle behavior and a +3 on receiving oral sex, this would result in a positive activity discrepancy score of +5). The same is then done for negative discrepancies; all negative discrepancies are summed together across the 35 behaviors (e.g., a –2 on performing oral sex and a –1 on receiving oral sex would equal –3). These sums indicate the *magnitude of discrepancy*, separately for positive and negative discrepancies, that a participant is experiencing in their current sexual partnership. Dependent on the intended purpose of the measure, a second calculation could be utilized: an average positive discrepancy score and average negative discrepancy score. To calculate these, the sum for each (positive and negative discrepancies) would be divided by the number of sexual behaviors the participant reported positive or negative discrepancies on, respectively. This would provide the *average discrepancy* across sexual behaviors, rather than the full magnitude of discrepancy.

Reliability

Due to the intended use of this measure—to assess discrepancies in desired and actual frequency of a variety of sexual behaviors—there is no expectation of reliability of data collected via the measure.

Validity

Through the first two measure development phases (e.g., the individual interviews and sexuality expert review), we determined that the measure possesses appropriate face and content validity. To lend support for criterion validity, we include the correlations of the sexual activity congruency score, average positive discrepancy, and average negative discrepancy with sexual satisfaction, as measured by the Global Measure of Sexual Satisfaction (GMSEX; Byers, Demmons, & Lawrance, 1998) for each of the samples tested. Sample 1 consisted of a female-only, heterosexual, University sample (N = 469, ages 18–25). Correlations with sexual satisfaction were: congruency score (r = .389, p < .001), positive discrepancy (r = –.254, p < .001), and negative discrepancy (r = .166, p < .001). Sample 2 was also a female-only University sample (N = 217, ages 18–25), predominantly identifying as heterosexual. Correlations with sexual satisfaction were: congruency score (r = .291 p < .01), positive discrepancy (r = –.237, p < .01), and negative discrepancy (r = .093, *ns*). Sample 3 (N = 442) consisted of a diverse sample of men and women of all ages. Correlations with sexual satisfaction were: congruency score (r = .385, p < .001), positive discrepancy (r = –.229, p < .001), and negative discrepancy (r = .184, p < .001). Sample 4 (N = 405) consisted of lesbian, bisexual, and heterosexual women of all ages. Correlations with sexual satisfaction were: congruency score (r = .247, p < .001), positive discrepancy (r = –.246, p < .001), and negative discrepancy (r = –.023, *ns*). Data show that, in all four samples, the number of sexual activities for which participants receive the desired frequency is positively associated with sexual satisfaction. This positive correlation indicates that more frequency-congruent behaviors is associated with higher sexual satisfaction. Additionally, average positive discrepancies are negatively associated with sexual satisfaction, indicating that participants wanting activities more than they are getting them is associated with lower sexual satisfaction. Finally, for samples 1 and 3, average negative discrepancy (doing activities more than they desire) is a negative number,

and was associated with higher sexual satisfaction, such that as the average negative discrepancy increased (approached closer to zero), sexual satisfaction was higher. Other validity assessments are not relevant.

Summary

The SWAGD measure has been tested via online survey delivery with samples diverse in age, gender, and sexual orientation from the U.S., Canada, and Europe primarily. In all four samples, the sexual activity congruency scores are positively associated with sexual satisfaction, indicating that increased number of sexual activities for which participants have congruence of desired and actual frequency is associated with higher sexual satisfaction.

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Exhibit

Sexual Want and Get Discrepancy Scale

The following is a list of sexual activities that some people like to do. Please rate how often you WANT to do each of the listed sexual activities, and how often you DO or GET each of them with your current or most recent sexual partner. Please remember to select a rating for how often you WANT, and how often you GET, each activity.

	I WANT this					I DO/GET this				
	Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes	Often	Always
1. Cuddling.	○	○	○	○	○	○	○	○	○	○
2. Kissing (on the mouth/lips).	○	○	○	○	○	○	○	○	○	○
3. Kissing (on the body).	○	○	○	○	○	○	○	○	○	○
4. Receiving breast/nipple stimulation (by hand).	○	○	○	○	○	○	○	○	○	○
5. Providing breast/nipple stimulation (by hand).	○	○	○	○	○	○	○	○	○	○
6. Receiving breast/nipple stimulation (by mouth).	○	○	○	○	○	○	○	○	○	○
7. Providing breast/nipple stimulation (by mouth).	○	○	○	○	○	○	○	○	○	○
8. Receiving genital touching from my partner (e.g., clitoral stimulation, fingering, penis stroking, "hand job").	○	○	○	○	○	○	○	○	○	○
9. Providing genital touching to my partner (e.g., clitoral stimulation, fingering, penis stroking, "hand job").	○	○	○	○	○	○	○	○	○	○
10. Giving oral sex (putting your mouth on your partner's genitals).	○	○	○	○	○	○	○	○	○	○
11. Receiving oral sex (your partner putting their mouth on your genitals).	○	○	○	○	○	○	○	○	○	○
12. Penile–vaginal sex.	○	○	○	○	○	○	○	○	○	○
13. Trying different sexual positions.	○	○	○	○	○	○	○	○	○	○
14. Talking about what I want/what feels good.	○	○	○	○	○	○	○	○	○	○

15. Dirty sex talk.	○	○	○	○	○	○	○	○	○	○
16. Receptive anal sex (I am penetrated).	○	○	○	○	○	○	○	○	○	○
17. Performative anal sex (I penetrate my partner).	○	○	○	○	○	○	○	○	○	○
18. Receiving anal play (e.g., fingering, licking).	○	○	○	○	○	○	○	○	○	○
19. Performing anal play (e.g., fingering, licking).	○	○	○	○	○	○	○	○	○	○
20. Using condoms.	○	○	○	○	○	○	○	○	○	○
21. Watching pornography with my partner.	○	○	○	○	○	○	○	○	○	○
22. Having sex in multiple locations (e.g., bedroom, kitchen).	○	○	○	○	○	○	○	○	○	○
23. Having multiple partners (e.g., three-some).	○	○	○	○	○	○	○	○	○	○
24. Hearing verbal affirmations (e.g., "you're sexy," "I love you").	○	○	○	○	○	○	○	○	○	○
25. Using sex toys on my partner.	○	○	○	○	○	○	○	○	○	○
26. My partner using sex toys on me.	○	○	○	○	○	○	○	○	○	○
27. Role playing (e.g., sexy nurse, cowboy).	○	○	○	○	○	○	○	○	○	○
28. Me strip teasing for my partner.	○	○	○	○	○	○	○	○	○	○
29. My partner strip teasing for me.	○	○	○	○	○	○	○	○	○	○
30. Skype/cybersex (e.g., video or chat based sexual interactions).	○	○	○	○	○	○	○	○	○	○
31. Sending sexts to my partner (e.g., sexual text or photos).	○	○	○	○	○	○	○	○	○	○
32. Receiving sexts from my partner (e.g., sexual text or photos).	○	○	○	○	○	○	○	○	○	○
33. Bondage (e.g., ties, handcuffs).	○	○	○	○	○	○	○	○	○	○
34. Other (please specify and rate).	○	○	○	○	○	○	○	○	○	○
35. Other (please specify and rate).	○	○	○	○	○	○	○	○	○	○

Sexual Desire Questionnaire

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The 65-item Sexual Desire Questionnaire (DESQ; Chadwick, Burke, Goldey, Bell, & van Anders, 2017) measures multi-faceted sexual desire. These facets may differ by sample (see below); we have found eight central themes across sexual majority and minority women and men: Intimacy, Eroticism, Stress Relief/Relaxation, Sexual Self-Esteem, Partner Focus, Power/Control, Fantasy Experience, and Thrill Seeking; however, we also found that heterosexual women combined

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Eroticism/Thrill Seeking into one facet and non-heterosexual women had an additional facet characterized by Relationship Management/Reproduction.

Development

We listed items that could characterize sexual desire, and compared them amongst our laboratory members, combining redundant items and eliminating items deemed irrelevant. We aimed to investigate the possibility of diverse and multifaceted sexual desire experiences; our goal was not to list all possible facets of desire. We administered the 65 items in two waves of data collection to individuals who were at least 18 years old in Wave I in our lab (n = 222) and Wave II online (n = 1133); we combined these data to create the total sample (N = 1355). Using an exploratory factor analysis, the items resolved into an eight-factor solution for the total sample: Intimacy, Eroticism, Stress Relief/Relaxation, Sexual Self-Esteem, Partner Focus, Power/Control, Fantasy Experience, and Thrill Seeking.

Social Location

We found that factor themes (e.g., Intimacy, Eroticism, Stress Relief/Relaxation, Sexual Self-Esteem, Partner Focus, Power/Control, Fantasy Experience, and Thrill Seeking) were generally consistent, with some exceptions, across different social locations by gender/sex and sexual orientation/identity and across different studies (Chadwick, Burke, Goldey, Bell & van Anders, 2017; Chadwick, Burke, Goldey, & van Anders, 2017). However, we also found that the themes were composed of different items depending on the sample demographics, suggesting that these themes may have different meanings based on demographics characteristics of the sample. By statistical tradition, different constructions of DESQ factors across samples are typically taken to indicate a lack of measure validity; however, this is a problematic assumption. We argue that, instead, considering differential constructions between groups appropriately attends to social context; it highlights how using alternate constructions of measures across different social locations may actually serve to socially situate the DESQ rather than invalidate it. Thus, although traditional measurement tool methodology encourages using the same subscale calculations across different samples, we encourage using a different approach (see scoring instructions below) that reflects a call for incorporating the unique identity parameters of independent samples in quantitative psychological research (Crenshaw, 1989; Else-Quest & Hyde, 2016; Haraway, 1988; Harding, 1992).

Response Mode and Timing

This measure can be completed on a computer or using paper-and-pencil in approximately 10 minutes. Participants indicate their agreement with the items as they have characterized the participant's sexual desire on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The center scale point (4) is labeled *neither agree nor disagree.* In our original questionnaire, we asked participants to reflect on sexual desire experienced for a partner; however, researchers could arguably alter the wording to assess an individual's characterization of sexual desire in any context or over any time period (e.g., past, most recent desire experience, etc.).

Scoring

No items are reversed scored. The 65 items can be averaged to create a total multifaceted sexual desire score. We do not recommend using preexisting DESQ subscales for each factor of sexual desire because the number of subscales may differ and/or be constructed differently, depending on the social location of the sample. Instead, constructs should be determined by sample, when possible, or within social groups (i.e., researchers should run an exploratory factor analysis on their sample to determine how the DESQ factors are constructed for that sample). However, if an independent exploratory factor analysis is not possible, researchers can compare factor means as long as results are interpreted via consideration of social location and context. Average scores on factors should be determined by adding the relevant items together and dividing by the total number of items present in that factor. See Table 1 below for items associated with each factor from the Entire Sample group in Chadwick, Burke, Goldey, Bell, & van Anders (2017). Higher scores on factors indicate a stronger characterization of sexual desire. Additionally, researchers can assess whether factors for their sample are constructed similarly to those in previous research. Comparisons can also be made across individual DESQ items.

Reliability

Across diverse samples, including undergraduates, community members, and individuals with varying sexual orientation/identities, our measure shows consistent reliability, with Cronbach's alpha values ranging from α = .64 to α = .96 (see table 3 in Chadwick, Burke, Goldey, Bell & van Anders, 2017). We do not anticipate that individuals would present similar scores on the DESQ over time because sexual desire is highly contextual dependent and is likely to change depending on the situation and time.

Validity

Showing convergent validity, both the dyadic and solitary dimensions of the Sexual Desire Inventory (SDI; Spector, Carey, & Steinberg, 1996) were significantly positively correlated with each of the eight DESQ factors (all rs

TABLE 1
Items Associated with Entire Sample Factors from Chadwick, Burke, Goldey, Bell, & van Anders (2017)

	Items
Intimacy (21 items)	11, 15, 25, 26, 29, 31, 37, 39, 40, 41, 47, 48, 49, 50, 51, 52, 55, 58, 61, 62, 64
Eroticism (12 items)	1, 4, 8, 24, 27, 30, 32, 34, 42, 53, 59, 63
Stress Relief/Relaxation (8 items)	13, 17, 19, 20, 35, 56, 60, 65
Sexual Self-Esteem (5 items)	3, 12, 36, 44, 54
Partner Focus (3 items)	2, 6, 22
Power/Control (3 items)	7, 33, 46
Fantasy Experience (3 items)	18, 28, 45
Thrill Seeking (3 items)	5, 10, 14

[1328–1344] = .062–.595, all *p*s < .05). To show divergent validity, we compared the strength of correlations and found that Dyadic SDI and Eroticism exhibited stronger positive correlations than Dyadic SDI and all other factors (all *p*s < .05), highlighting how Dyadic SDI more strongly reflects erotic sexual desire only, not multifaceted sexual desire. Similarly, we found that Solitary SDI and Eroticism ($r(1344) = .265$, $p < .05$), and Solitary SDI and Fantasy Experience ($r(1344) = .321$, $p < .05$, exhibited positive correlations that were significantly stronger than correlations between SDI Solitary and other factors, ($z = 2.02$, $p < .05$; $z = 3.61$, $p < .05$).

Summary

Our questionnaire has been used in samples both in-lab and online. We found that the same general factor themes emerge across samples of different social locations by gender/sex and sexual orientation/identity, with some exceptions, though these themes also sometimes reflected differential construction across these social locations. Examining multifaceted sexual desire, and whether the factors that make up sexual desire are different between individuals and/or change across context and time remain interesting directions for future work.

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Exhibit

Sexual Desire Questionnaire

For each question, rank your agreement with the following: When you have experienced sexual desire for a partner, is it generally characterized by a desire to …?

	1 Strongly Disagree	2	3	4 Neither Agree nor Disagree	5	6	7 Strongly Agree
1. Experience orgasm.	○	○	○	○	○	○	○
2. Give your partner physical pleasure.	○	○	○	○	○	○	○
3. Feel wanted/desired.	○	○	○	○	○	○	○
4. Be touched.	○	○	○	○	○	○	○
5. Have a thrill.	○	○	○	○	○	○	○
6. Make your partner feel happy.	○	○	○	○	○	○	○

7. Feel dominant/powerful.	○	○	○	○	○	○	○
8. Experience specific sexual activities.	○	○	○	○	○	○	○
9. Feel protected.	○	○	○	○	○	○	○
10. Try something new.	○	○	○	○	○	○	○
11. Experience companionship.	○	○	○	○	○	○	○
12. Feel irresistible.	○	○	○	○	○	○	○
13. Relieve stress.	○	○	○	○	○	○	○
14. Do something exciting.	○	○	○	○	○	○	○
15. Express love for your partner.	○	○	○	○	○	○	○
16. Surprise your partner.	○	○	○	○	○	○	○
17. Be distracted from some other anxiety-provoking issue.	○	○	○	○	○	○	○
18. Act out a sexual fantasy.	○	○	○	○	○	○	○
19. Fall asleep.	○	○	○	○	○	○	○
20. Alleviate boredom.	○	○	○	○	○	○	○
21. Be dominated.	○	○	○	○	○	○	○
22. Please your partner.	○	○	○	○	○	○	○
23. Impress your partner.	○	○	○	○	○	○	○
24. Feel happy.	○	○	○	○	○	○	○
25. Make your partner feel emotionally closer to you.	○	○	○	○	○	○	○
26. Make your partner feel wanted/desired.	○	○	○	○	○	○	○
27. Feel sexually excited or aroused.	○	○	○	○	○	○	○
28. Fantasize.	○	○	○	○	○	○	○
29. Make your partner feel more secure about your relationship with him/her.	○	○	○	○	○	○	○
30. Feel sexually satisfied.	○	○	○	○	○	○	○
31. Feel a sense of commitment from your partner.	○	○	○	○	○	○	○
32. Be physically close to your partner in a sexual way.	○	○	○	○	○	○	○
33. Experience power/control.	○	○	○	○	○	○	○
34. End craving.	○	○	○	○	○	○	○
35. Reconcile with your partner/end a fight.	○	○	○	○	○	○	○
36. Feel sexy.	○	○	○	○	○	○	○
37. Experience intimacy.	○	○	○	○	○	○	○
38. Feel independent and in control of your body.	○	○	○	○	○	○	○
39. Show your partner that you care.	○	○	○	○	○	○	○
40. Feel cared for.	○	○	○	○	○	○	○
41. Be protective.	○	○	○	○	○	○	○
42. Touch your partner's body.	○	○	○	○	○	○	○
43. Reproduce.	○	○	○	○	○	○	○
44. Feel special.	○	○	○	○	○	○	○
45. View erotic films or read an erotic story.	○	○	○	○	○	○	○
46. Feel in control of your relationship.	○	○	○	○	○	○	○
47. Initiate or maintain a romantic relationship.	○	○	○	○	○	○	○
48. Feel loved.	○	○	○	○	○	○	○
49. Experience romance.	○	○	○	○	○	○	○
50. Feel emotionally closer to your partner.	○	○	○	○	○	○	○
51. Make your partner feel that you are committed.	○	○	○	○	○	○	○
52. Cuddle with your partner.	○	○	○	○	○	○	○

53. See your partner naked.	○	○	○	○	○	○	○
54. Boost your self-esteem or feel good about yourself.	○	○	○	○	○	○	○
55. Feel more secure about your relationship with your partner.	○	○	○	○	○	○	○
56. Relieve tension/frustration.	○	○	○	○	○	○	○
57. Experience desire for its own sake/no goal.	○	○	○	○	○	○	○
58. Make your partner feel that you are supportive of him/her/them.	○	○	○	○	○	○	○
59. Make yourself feel good.	○	○	○	○	○	○	○
60. Avoid conflict with your partner.	○	○	○	○	○	○	○
61. Make your partner feel special.	○	○	○	○	○	○	○
62. Feel a sense of support from your partner.	○	○	○	○	○	○	○
63. Experience physical pleasure.	○	○	○	○	○	○	○
64. Grow closer to your partner or develop a stronger connection with him/her/them.	○	○	○	○	○	○	○
65. Experience relaxation.	○	○	○	○	○	○	○

66. Can you please identify whom you imagined? You do not need to give a specific name; just please provide your relation to this person (e.g. relationship partner, famous person, friend, etc.)

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Female Sexual Desire Questionnaire

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The Female Sexual Desire Questionnaire (FSDQ) was designed to measure sexual desire among women who are engaged in a heterosexual relationship. It evaluates the psychological and interpersonal factors influencing sexual desire that women view as being central to this experience.

Development

Preliminary items for the FSDQ were determined through in-depth individual interviews with 40 heterosexual, partnered women from the general population regarding their own meaning and experiences of sexual desire. The findings of these interviews are described in detail elsewhere (see Goldhammer & McCabe, 2011a). Women described their sexual desire as being one or a combination of: a physical sensation (e.g., an ache for sexual release); a cognitive process (e.g., anticipation of a future sexual interaction); an emotional experience, akin to other emotions such as anger, sadness, etc.; and/or an interpersonal reaction (i.e., making explicit reference to a partner as a trigger or object of desire). Women also described that their experiences of sexual desire were embedded within the context of their relationship, and were very much dependent upon the overall emotional tone of that relationship (being either positive or negative).

Interview data were analyzed using the principles of interpretive phenomenological analysis (see Goldhammer & McCabe, 2011a), and questionnaire items were developed to reflect the themes extracted from these data. Item construction utilized the words that women themselves used in order to make the questionnaire more accessible for the target population. In addition, several items that also represented themes drawn from these interviews were selected from currently available female sexual function/

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dysfunction measures (with wording modified as necessary). FSDQ items were designed to probe both the experience of sexual desire, as well as factors that influence this experience. Questions assessing the DSM-IV-TR criteria for Hypoactive Sexual Desire Disorder (HSDD; American Psychiatric Association, 2000) were included as part of the measure.

Approximately 250 candidate items were peer reviewed by a group of three researchers/clinicians for item appropriateness, relevance, redundancy, and ease of understanding. This group included individuals holding PhDs in psychology with expertise in the area of sexuality, and experience in clinical psychology, statistics, and psychometrics. Through this process, the measure was reduced to 191 items assessing respondents' sexual experiences, behaviors, beliefs, and attitudes toward sexual activity during the preceding four-week period. These items were then developed into a preliminary measure that was administered online to heterosexual, partnered women in the general population to determine items that comprised the experience of, and factors influencing, sexual desire. Demographic questions and questions related to the existence of sexual problems were also included.

A total of 741 women completed the FSDQ online. Participants were between 18 and 71 years of age (M = 30.0, SD = 10.8), with relationship length varying between .25 years and 49 years (M = 6.9, SD = 8.2). Just under half of the total sample (46.6%) self-identified the existence of a sexual problem (e.g., painful intercourse, inability to achieve orgasm), the presence of which ranged in length from .1 to 44 years (M = 4.7, SD = 6.0). Of the participants reporting sexual problems, 24.5 percent reported only one sexual problem, while 22.1 percent reported two or more sexual problems; 21.9 percent reported that their partner experienced a sexual problem, and 13.9 percent reported that both they and their partner were experiencing a sexual problem.

Exploratory factor analysis with direct oblimin rotation was conducted in order to identify items for retention and the underlying domain structure of the FSDQ. A priori criteria for domain/item retention were factors with eigenvalues greater than 1 and items with factor loadings greater than .40. In addition, items demonstrating loadings of greater .40 across multiple factors, and those having no significant loadings (< .40) on any factor were removed. This process retained 50 items arranged across six domains. Domain labels (and the number of items contained within each domain, the absolute average factor loading, and Cronbach's alpha) were: *Dyadic Desire* (16, average factor loading .59, α = .92), *Solitary Desire* (4, average factor loading .84, α = .89), *Resistance* (13, average factor loading .55, α = .91), *Positive Relationship* (10, average factor loading .63, α = .91), *Sexual Self-Image* (4, average factor loading .66, α = .80), and *Concern* (3, average factor loading .66, α = .88). *Sexual Self-Image* was the only domain to contain a complex item that also loaded > .40 on *Dyadic Desire*; this item was retained based on clinical considerations.

Almost 60 percent of total variance was accounted for by this domain structure. The *Dyadic Desire, Solitary Desire*, and *Resistance* domains of the FSDQ together accounted for almost 50 percent of the total variance explained. These were conceptualized as reflecting three different, yet interrelated, aspects of a woman's sexual desire. The *Positive Relationship, Sexual Self-Image*, and *Concern* domains together accounted for just over 10 percent of the total variance explained. These were conceptualized as key factors influencing women's sexual desire.

Response Mode and Timing

A 6-point Likert-type scale was used for responding to each item (scoring range of 1–6 per item), with answer options dependent on the respective item. We have used four answer formats with the measure: (1) *not at all* to (6) *once a day or more*; (1) *never* to (6) *always*; (1) *strongly disagree* to (6) *strongly agree;* and (1) *very infrequently* to (6) *very frequently*. We have found the latter set of response choices to be the simplest and easiest to use in administration and scoring. The 50-item measure was estimated to take less than 20 minutes to complete.

Scoring

Totals could be obtained for each of the six domains or for the overall scale (see Goldhammer & McCabe, 2011b). A higher score on each domain indicates a higher level of sexual desire, with the exception of the *Resistance* and *Concern* domains, where the reverse pattern of scoring applies.

Reliability

Following the item reduction phase and the identification of FSDQ domains, reliability and validity analyses were conducted for each domain and for the overall measure. The internal consistency of the FSDQ was determined by computing Cronbach's coefficient alphas for each domain; these were high, ranging from .80 to .92. The overall FSDQ was shown to have an alpha of .84. Interdomain correlations were determined using Pearson correlation coefficients, in order to evaluate the extent to which FSDQ domains measure unidimensional aspects of sexual desire. Correlations ranged from .14 to .70, indicating that the domains measure related yet separate aspects of sexual desire. The lowest correlations were observed between *Solitary Desire* and every other FSDQ domain, aside from a modest correlation with *Dyadic Desire* (.40). The highest interdomain correlation observed was that between *Resistance* and *Concern* (for more details, see Goldhammer and McCabe, 2011b).

Validity

Construct (convergent) validity was evaluated by testing the relationship of the FSDQ with two other sexuality measures that evaluate similar constructs: the Hurlbert Index of Sexual Desire (HISD; Apt & Hurlbert, 1992) and the Sexual Desire Inventory (SDI; Spector, Carey & Steinberg, 1996). Table 1 demonstrates that all FSDQ domain scores were significantly correlated with the Dyadic Desire and Solitary Desire domains of the SDI ($p < .01$), respectively, aside from the FSDQ *Positive Relationship* domain and the SDI Solitary Desire domain, which did not reach statistical significance. HISD total scores were also significantly correlated with each FSDQ domain ($p < .01$), except for *Dyadic Desire*. Furthermore, the FSDQ total score demonstrated a significant positive correlation with both the HISD and the two SDI domains (see Table 1).

A short-form of the FSDQ was created by selecting the highest loading items on each domain to create a six-item measure (see Table 2). Each of these items is representative of the underlying domain construct being assessed. The clinical utility of this short-form measure remains to be determined; however, it has the potential to be used as a quick, self-administered tool that assesses the six facets of a woman's sexual desire that are assessed by the 50-item FSDQ. The use of the FSDQ to identify women who experience sexual dysfunction can be found in McCabe and Goldhammer (2013). However, further validation work is needed on this aspect of the scale. A more detailed description of the development and validation of the FSDQ can be found in Goldhammer and McCabe (2011b).

TABLE 1
Pearson correlation coefficients between FSDQ domain scores, SDI domain scores, and HISD total score

FSDQ Domain	SDI Dyadic domain	SDI Solitary domain	HISD total
Dyadic Desire	.78**	.25**	.05**
Solitary Desire	.33**	.83**	.25**
Resistance	–.49**	–.13**	.33**
Positive Relationship	.44**	.07**	–.16**
Sexual Self-Image	.36**	.12**	–.16**
Concern	–.48**	–.12**	.26**
FSDQ total	.65**	.43**	.24**

**$p < .01$, two-tailed.

TABLE 2
Short-form of the FSDQ

FSDQ Domain	Item
Dyadic Desire	How often did you want to express yourself sexually with your partner?
Solitary Desire	When you were having enjoyable sexual thoughts/fantasies, how often did these lead you to *desire* self-stimulation?
Resistance	How often did your partner approach you to participate in sexual activity when you were clearly not "in the mood"?
Positive Relationship	How often did you feel emotionally close to your partner (in general)?
Sexual Self-Image	How often were you worried about your body looking unattractive when naked in front of your partner?
Concern	How often did your level of sexual desire cause you to feel distressed?

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Exhibit

Female Sexual Desire Questionnaire

The following questions ask about your sexual desire in general. Please select the answer that best describes your sexual experiences over the past *four weeks*.

	1 Very Infrequently	2	3	4	5	6 Very Frequently
1. How often did you want to express yourself sexually with your partner?	○	○	○	○	○	○
2. How often did you experience sexual desire?	○	○	○	○	○	○

3. How often did you participate in sexual activity with your partner because you felt sexual desire towards him?	○	○	○	○	○	○
4. How often did seeing your partner in an intimate setting start your feelings of sexual desire?	○	○	○	○	○	○
5. How often did you experience sexual desire for your partner (or another person) when you were with this person?	○	○	○	○	○	○
6. How often did you have enjoyable sexual thoughts or fantasies when you were around your partner or people you find sexually attractive?	○	○	○	○	○	○
7. When you were experiencing sexual desire, how often did you act on this by starting sexual activity with your partner?	○	○	○	○	○	○
8. How often did you feel sexually frustrated, irritable or a build–up of sexual tension?	○	○	○	○	○	○
9. When you were having enjoyable sexual thoughts/ fantasies, how often did these lead you to seek out a sexual encounter with a partner?	○	○	○	○	○	○
10. How often did you feel sexually attracted to your partner either when thinking about him or when he was around?	○	○	○	○	○	○
11. How often did your partner stroking or touching you intimately start your feelings of sexual desire?	○	○	○	○	○	○
12. When you were having enjoyable sexual thoughts/ fantasies, how often did these lead you to desire some type of sexual activity with a partner?	○	○	○	○	○	○
13. How often did you want or need to increase your emotional closeness with your partner through sexual activity with him?	○	○	○	○	○	○
14. How often did you plan a sexual encounter in advance?	○	○	○	○	○	○
15. How often did you feel sexually attracted to another individual (who may or may not have been your partner)?	○	○	○	○	○	○
16. How often did you have a new or spontaneous sexual experience with your partner?	○	○	○	○	○	○
17. When you were having enjoyable sexual thoughts/ fantasies, how often did these lead you to desire self-stimulation?	○	○	○	○	○	○
18. How often did you have enjoyable sexual thoughts or fantasies once you had begun self-stimulation?	○	○	○	○	○	○
19. I enjoy self-stimulation (i.e. masturbation).	○	○	○	○	○	○
20. How often did you want to participate in self-stimulation (i.e. masturbation)?	○	○	○	○	○	○
21. How often did your partner approach you to participate in sexual activity when you were clearly not "in the mood"?	○	○	○	○	○	○
22. How often did you feel like you had to participate in sexual activity?	○	○	○	○	○	○
23. How often did you avoid situations that may have encouraged your partner to want or start sexual activity?	○	○	○	○	○	○
24. How often did you turn down your partner's sexual advances because you were not experiencing sexual desire?	○	○	○	○	○	○

25. How often did the way your partner approached you result in you not wanting to take part in sexual activity with him?	○	○	○	○	○	○
26. How often was it difficult to get yourself "in the mood" to take part in sexual activity with your partner?	○	○	○	○	○	○
27. How often did you lose interest in sexual activity once it had begun?	○	○	○	○	○	○
28. How often were you worried that your partner would stray from the relationship if you did not take part in sexual activity with him?	○	○	○	○	○	○
29. How often did you have unpleasant or negative sexual thoughts?	○	○	○	○	○	○
30. How often did you become interested in sexual activity only after your partner had started sexual activity?	○	○	○	○	○	○
31. How often did you feel worried or anxious about participating in sexual activity with your partner?	○	○	○	○	○	○
32. How often did you have arguments with your partner about your sexual relationship?	○	○	○	○	○	○
33. How often were you too tired to participate in sexual activity, despite experiencing sexual desire?	○	○	○	○	○	○
34. How often did you feel emotionally close to your partner (in general)?	○	○	○	○	○	○
35. How often was your partner considerate and caring towards you in everyday matters?	○	○	○	○	○	○
36. I am satisfied with my current relationship overall.	○	○	○	○	○	○
37. How often were you able to satisfactorily discuss general or daily (i.e. non–sexual) matters with your partner?	○	○	○	○	○	○
38. How often did you feel emotionally close to your partner when you took part in sexual activity with him?	○	○	○	○	○	○
39. How often you were able to communicate your sexual needs, wants, and desires with your partner?	○	○	○	○	○	○
40. My current partner is a "good lover"/ sexual partner.	○	○	○	○	○	○
41. How often did you feel good after a sexual encounter with your partner?	○	○	○	○	○	○
42. How often did you make time to spend with your partner in an intimate situation?	○	○	○	○	○	○
43. How often did you avoid discussing sexual matters because it created tension in your relationship?	○	○	○	○	○	○
44. How often were you worried about your body looking unattractive when naked in front of your partner?	○	○	○	○	○	○
45. How often did concerns about your body prevent you from expressing yourself sexually?	○	○	○	○	○	○
46. How often did you feel "sexy" (i.e. sexually desirable or attractive)?	○	○	○	○	○	○
47. How often did you feel good about yourself when you were sexually active?	○	○	○	○	○	○
48. How often did your level of sexual desire cause you to feel distressed?	○	○	○	○	○	○
49. How often was your level of sexual desire a problem or concern to you?	○	○	○	○	○	○
50. How often was your level of sexual desire a problem or concern in your relationship?	○	○	○	○	○	○

The Partner-Specific Sexual Liking and Sexual Wanting Scale

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The 15-item Partner-Specific Sexual Liking and Wanting scale (Krishnamurti & Loewenstein, 2012) consists of two subscales measuring distinct constructs of sexual experience: the motivation to engage in a sexual activity with a sexual partner (*Partner-Specific Sexual Wanting*) and the enjoyment of that sexual activity (*Partner-Specific Sexual Liking*).

Development

We created an initial set of 22 items either drawn and modified from existing measures of general sexual satisfaction (Hudson, Harrison, & Crosscup, 1981) and general sexual desire (Spector, Carey, & Steinberg, 1996) or generated specifically to measure dimensions of partner-specific sexual liking and wanting that were perceived to be missing from existing scales (Krishnamurti & Loewenstein, 2012). We administered these items to an online sample of 1,145 adult volunteers in a sexually active relationship. Participants were recruited from advertisements on www.craigslist.org in major U.S. cities and through a link on the *New York Times* website. Principal components analysis (PCA) with an oblique rotation procedure was conducted to assess the underlying factor structure of the items. Four items were eliminated because they had low inter-item correlation and three were removed because they did not contribute to a simple factor structure. The best-fit solution revealed two components with eigenvalues > 3.0: the 10-item *Partner Specific Sexual Liking* (*PSSL*) subscale and the 5-item *Partner Specific Sexual Wanting* (*PSSW*) subscale.

Response Mode and Timing

The measure can be completed on a computer or using paper and pencil and takes 2–4 minutes to complete. For the *PSSL* subscale, participants respond to Items 1–10 on a 5-point scale. For the *PSSW* subscale, item 11 is broken down into ordered categories of frequency of sexual thoughts. Item 12 measures degree of intensity of those thoughts on a 9-point scale with an obvious midpoint. Items 13–15 are measured on a 5-point scale.

Scoring

Items 3 and 7 are reverse-scored. To create subscales, we summed the items loading on each factor. The *PPSL* is composed of items 1 to 10. The *PSSW* is composed of items 11 to 15. Due to the non-uniform response scales of each item in the *PSSW* subscale, before summing the items, we calculated a composite score by reweighting the individual items so that all were on a 9-point scale (e.g., so that each item was normalized with a weight of one). The *PSSL* subscale items composite score was a simple summation of the items. Higher scores indicated greater levels of partner-specific sexual wanting and liking.

Reliability

Both subscales showed high internal consistency, with Cronbach's alphas of .87 for *PSSW* and .93 for *PSSL*. No increases in alpha for either scale were achievable by eliminating more items. Both subscales of the solution showed high internal consistency when analyzed by gender, with a Cronbach's alpha of .88 and .85 for *PSSW*, and a Cronbach's alpha of .94 and .93 for PSSL, in women and men, respectively. *PSSL* and *PSSW* were distinct but highly correlated, $r = .62$, with the intercorrelation between the subscales lower than their respective reliability coefficients. To assess test–retest reliability, the scale was re-administered to a subsample of 30 participants seven days after its first administration. Summed scores from the first and second administrations of *PSSL* correlated at $r = .75$. Summed scores from the first and second administrations of the *PSSW* correlated at $r = .70$. This degree of correlation suggested that the *PSSL* and *PSSW* scales each captured a trait that was relatively stable.

TABLE 1
Convergent Validity with Three Measures by Gender

Measures	Partner-specific sexual liking		Partner-specific sexual wanting	
	Men	Women	Men	Women
Sexual Satisfaction Inventory (SSI)	.24	.61**	.20	.44**
Relationship Satisfaction (RAS)	.74**	.66**	.57*	.24
Hurlbert Index of Sexual Desire (HISD)	.56**	.52**	.64**	.66**

*$p < .05$. **$p < .01$.

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Validity

To test for both convergent and discriminant validity, we recruited a new sample of individuals from Mechanical Turk ($N = 67$; Krishnamurti & Loewenstein, 2012) to whom we administered the PSSLW scale, as well as measures of sexual desire (Hurlbert Index of Sexual Desire; Apt & Hurlbert, 1992), sexual satisfaction (Sexual Satisfaction Inventory; Whitley & Poulsen, 1975), and relationship satisfaction (Relationship Assessment Scale; Hendrick, 1988). Table 1 shows the correlations between scales. For women, the correlations between *PSSL* and the RAS and *PSSL* and the SSI were significantly stronger than the correlation between *PSSW* and the RAS, $t(47) = 4.07$, $p < .001$, and marginally stronger than the correlation between *PSSW* and the SSI, $t(36) = 1.25$, $p = .10$. For men, the correlations between *PSSL* and the RAS and *PSSL* and the SSI were not significantly stronger than the correlation between *PSSW* and the RAS or *PSSW* and the SSI. Conversely, the correlation between *PSSW* and the HISD—both of which measure sexual desire—was stronger than the correlation between *PSSL* and the HISD for both men and women, although not significantly so.

Cross-validation and predictive validity were measured on a third randomly selected nationally representative sample of 2,589 participants collected through a survey research company (Krishnamurti & Loewenstein, 2012). A confirmatory factor analysis was conducted to test the validity of the two-factor structural model derived from the PCA. Items 1–10 loaded strongly on the *PSSL* factor and items 11–15 loaded strongly on the *PSSW* factor.

We regressed self-reported frequency of sexual initiation in the relationship on *PSSL* and *PSSW*. We also regressed the difference score of orgasm satisfaction from partner and orgasm satisfaction from masturbation on *PSSL* and *PSSW*. Higher *PSSL* was associated with higher levels of partner initiation of sexual contact and, conversely, lower levels of self-initiation of sexual contact. Higher PSSW was also associated with higher levels of self-initiation of sexual contact. *PSSL* was more strongly associated with frequency of orgasm than was *PSSW*. *PSSL* was strongly associated with a more satisfying orgasm from partner than from self (as denoted by a positive difference score of orgasm satisfaction from masturbation subtracted from orgasm satisfaction from partner). *PSSW* was not a significant predictor of relative orgasm satisfaction. See Krishnamurti & Loewenstein (2012) for a presentation of the regression findings.

Summary

We developed and validated a short measure to assess and distinguish between Liking and Wanting sex in sexual partnerships for both men and women. More generally, our measures can be used to track changes in wanting and liking as a function of demographics, such as age or relationship duration. It can also be used to examine these differences across genders. Yet, levels of sexual liking and sexual wanting within a relationship may, in addition, be reflective of a more dispositional trait. We observed gender differences in levels of sexual wanting, but not in levels of sexual liking. This disconnect in the degree of sexual wanting and sexual liking among women may help explain some of the mixed results in the sexual literature with respect to sex drive differences between genders (e.g., Baumeister, Catanese, & Vohs, 2001). Other work has shown that PSSL may account for the relationship between sexual frequency and happiness (Loewenstein, Krishnamurti, Kopsic, & McDonald, 2015).

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Exhibit

The Partner-Specific Sexual Liking and Sexual Wanting Scale

Instructions: Below are several statements about your current sexual partner and your sexual relationship with that partner. *Please read each of the following statements carefully and check the option that best describes your experience.*

	Rarely or never	Occasionally or some of the time	A moderate amount of the time	Often or most of the time	Always
1. My partner is sexually very exciting.	○	○	○	○	○
2. Sex is fun for my partner and me.	○	○	○	○	○
3. Our sexual relationship lacks quality.	○	○	○	○	○

4. Sex with my partner is wonderful.	○	○	○	○	○
5. My partner is very sensitive to my sexual needs and desires.	○	○	○	○	○
6. Our sex life is very exciting.	○	○	○	○	○
7. I feel that our sex life is boring.	○	○	○	○	○
8. I enjoy the techniques my partner likes or use.	○	○	○	○	○
9. I lose track of time when I have sex with my partner.	○	○	○	○	○
10. My sexual fantasies feature my partner.	○	○	○	○	○

11. Thinking about the last month, how often have you had sexual thoughts about your primary sexual partner when you were *not* engaging in sexual activity? *Please check the option that describes your experience.*

- ○ Not at all
- ○ Once or twice a month
- ○ Once a week
- ○ Twice a week
- ○ Three to four times a week
- ○ Once a day
- ○ A couple of times a day
- ○ Many times a day

12. When you have sexual thoughts about your primary sexual partner, how would you rate the intensity of those feelings?

	1	2	3	4	5	6	7	8	9	
Not at all strong	○	○	○	○	○	○	○	○	○	Extremely strong

Below are several statements about your current sexual partner and your sexual relationship with that partner. *Please read each of the following statements carefully and check the option that best describes your experience.*

	Rarely or never	Occasionally or some of the time	A moderate amount of the time	Often or most of the time	Always
13. When you *look* at your primary sexual partner, how often does this result in physical sexual arousal (e.g., an erection, increased heart rate, lubrication, etc.)?	○	○	○	○	○
14. When you *think* about your primary sexual partner, how often does this result in physical sexual arousal (e.g., an erection, increased heart rate, lubrication, etc.)?	○	○	○	○	○
15. When you have *physical contact* with your primary sexual partner, how often does this result in physical sexual arousal (e.g., an erection, increased heart rate, lubrication, etc.)?	○	○	○	○	○

Sexual Novelty Scale

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The purpose of this scale is to facilitate future research on the role that sexual novelty plays in relationship development, maintenance, and satisfaction. The 5-item Sexual Novelty Scale (SNS; Matthews et al., 2018) was created to measure the extent to which partners in committed romantic relationships engage in sexually novel behavior.

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Development

Two samples, consisting of 518 adult participants from the United States who had been in committed romantic relationships for six months or longer, were recruited online through Amazon's Mechanical Turk to answer questions about their relationships.

A pool of 10 preliminary items was generated by the researchers to capture individual differences in levels of sexual novelty in committed relationships. An exploratory factor analysis (Sample 1) conducted on the 10-item SNS revealed a single factor (eigenvalue = 7.04) that accounted for 70.4 percent of variance, with factor loadings ranging from .66 to .93.

In order to create a brief measure to maximize efficiency in future research, we selected a subset of 5 items to include in Sample 2 based on strong factor loadings (i.e., > .80) and conceptual fit with our construct. A factor analysis on the shorter 5-item version of the SNS in Sample 2 confirmed the single factor structure (eigenvalue = 3.70), which accounted for 74.0 percent of the variance and had factor loadings ranging from .63 to .93.

Response Mode and Timing

Items on the Sexual Novelty Scale are rated on a 7-point Likert-type scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Participants can complete the scale online or on paper in approximately 2–3 minutes.

Scoring

One of the five items (Item 1) is reverse coded. After reverse coding Item 1, the scores of the 5 items are averaged, with total scores ranging from 1 to 7. Higher scores represent greater levels of sexual novelty within a relationship.

Reliability

The interitem reliability of the 5-item Sexual Novelty Scale in Samples 1 and 2 (Cronbach's alphas of .94 and .91, respectively) was high and compared favorably with the original 10-item version ($\alpha = .95$). To investigate test–retest reliability, participants in Sample 2 ($N = 244$) completed the 5-item SNS twice, approximately two weeks apart. As predicted, scores on the SNS for Time 1 and Time 2 were strongly positively correlated, $r(242) = .86$, 95 percent CI [.82, .89], $p < .001$, indicating good temporal stability.

Validity

Correlational analyses from both samples support the construct validity of the 5-item Sexual Novelty Scale. To establish convergent validity, we included measures that should be conceptually related to sexual novelty, including both sex-related (e.g., erotophilia, sexual sensation seeking, sexual assertiveness, sexual self-esteem, sex drive) and non-sex-related (e.g., novelty seeking, sensation seeking, openness to experience) measures. We also assessed demographic characteristics (e.g., relationship length) and personal traits (e.g., self-esteem) that should relate to sexual novelty, as well as overall relationship satisfaction, sexual satisfaction, and sexual boredom. To establish discriminant validity, measures of sexual coercion and aggression were included.

As expected, people who scored lower in sexual boredom and higher in novelty seeking, sensation seeking, openness to experience, and sex-positive attitudes (i.e., erotophilia, sexual sensation seeking, sexual assertiveness, sexual self-esteem, and sex drive) reported greater levels of sexual novelty in their romantic relationships. Personal traits such as self-esteem were also positively related to levels of sexual novelty. Importantly, sexual novelty predicted both overall relationship satisfaction and sexual satisfaction. Conversely, measures of sexual coercion and aggression in relationships were not correlated with sexual novelty, suggesting that the SNS assesses healthy sexual behaviors. See Matthews et al. (2018) for a more detailed presentation of findings.

Criterion-related validity was established by (a) correlational research indicating that positive characteristics of the relationship (e.g., commitment to the relationship, egalitarianism) and other sexual behaviors (e.g., frequent sexual fantasies, sexual frequency, pornography use) predicted engaging in sexual novelty, and (b) experimental research showing that providing participants with additional information about sexual novelty (e.g., in the form of blog posts constructed using social psychology-based methods of persuasion) led to positive changes in attitudes and behaviors toward sexual novelty (see Rosa et al., 2019).

Summary

Across two samples, the unidimensional Sexual Novelty Scale (SNS) demonstrated high internal consistency and test–retest reliability, as well as convergent, discriminant, and criterion-related validity. Our results indicate that the 5-item Sexual Novelty Scale is a brief, reliable, and valid measure of the extent to which partners in committed romantic relationships engage in sexually novel behavior.

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Exhibit

Sexual Novelty Scale

Directions: Using the scale below, please rate how much you agree or disagree with each statement.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neutral	5 Somewhat Agree	6 Agree	7 Strongly Agree
1. Sex between my partner and me tends to follow a predictable routine.	○	○	○	○	○	○	○
2. Sexual experimentation is an important part of our relationship.	○	○	○	○	○	○	○
3. My partner and I often try new things in bed.	○	○	○	○	○	○	○
4. It is common for my partner and me to try new sex positions.	○	○	○	○	○	○	○
5. My partner and I like to "mix things up" to keep our sex life exciting.	○	○	○	○	○	○	○

Sexual Desire Inventory—2

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The Sexual Desire Inventory—2 (SDI-2) is a self-administered questionnaire developed to measure sexual desire. To date, sexologists have had difficulty measuring this construct. Previous measurement of sexual desire involved either indirect measurement through examining frequency of sexual behavior, or by broad self-report of cognitions such as "rate your level of sexual desire." Both these methods are less accurate measures of sexual desire because first, sexual desire is theoretically a multidimensional construct, and second, no empirical data are available to suggest that sexual desire and behavior are perfectly correlated. For the purposes of this questionnaire, sexual desire was defined as interest in sexual activity, and it was measured as primarily a cognitive variable through amount and strength of thought directed toward approaching or being receptive to sexual stimuli.

Development

The items for the SDI-1 were selected by considering theoretical models of desire and clinical experience in assessing sexual desire disorders. They were presented initially to sexologists and then to a small pilot sample ($N = 20$ students) who rated the clarity and content validity of the items. Next, a sample of 300 students completed the SDI. Based on factor analytic data, items were eliminated or reworded to measure two dimensions of sexual desire: Dyadic Sexual Desire (interest in behaving sexually with a partner) and Solitary Sexual Desire (interest in behaving sexually by oneself).

To date, the 14-item SDI-2 has been administered to three samples for the purpose of collecting psychometric data. These samples include 380 students (Spector, Carey, & Steinberg, 1996), 40 subjects living in geriatric long-term care facilities (Spector & Fremeth, 1996), and 40 couples (Spector & Davies, 1995). The SDI-2 can be used to measure sexual desire in both the general population or in clinical samples. It has been used to measure sexual desire with both younger (M age = 20.8) and older (M age = 82.5) samples, and individuals and couples.

Response Mode and Timing

For each item, respondents are asked to indicate the number that best reflects their thoughts and feelings about

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their interest in or wish for sexual activity. They are asked to use the last month as a referent. For the three frequency items (Items 1, 2, 10), respondents select one of eight options (scored from 0 to 7). For the remaining eight strength items, respondents rate their level of sexual desire from 0 (*no desire*) to 8 (*strong desire*). Most respondents complete the scale within 5 minutes.

Scoring

Items 1–8 are summed to obtain a *Dyadic Sexual Desire* score. Items 10 to 12 are summed to obtain a *Solitary Sexual Desire* score. Items 9, 13, and 14 are not included in the subscale calculations. Within a couple, female dyadic scores can be subtracted from male dyadic scores to obtain a desire discrepancy score.

Reliability

Internal consistency estimates (using Cronbach's alpha coefficients) were calculated for the *Dyadic* scale ($r = .86$) and the *Solitary* scale ($r = .96$), indicating strong evidence of reliability (Spector et al., 1996). Test–retest reliability was calculated at $r = .76$ over a 1-month period (Carey, 1995).

Validity

Evidence for factor validity has been examined. Factor analyses revealed that Items 1–8 loaded high (i.e., >.45) on the dyadic factor, whereas Items 10–12 loaded high on the solitary factor. Both factors had eigenvalues > 1 (Spector et al., 1996).

Concurrent validity evidence, collected from 380 students, revealed that solitary sexual desire is correlated with the frequency of solitary sexual behavior ($r = .80$, $p < .0001$), and with erotophilia ($r = -.28$, $p < .0001$; Spector, 1992). Dyadic desire is correlated with the frequency of dyadic sexual behavior ($r = .34$, $p < .0001$). Note that neither dyadic nor solitary desire is perfectly correlated with sexual behavior, indicating that measuring desire indirectly through behavior would be inaccurate. Discriminant validity evidence reveals that neither subscale of the SDI is correlated with social desirability (Spector, 1992).

A second study conducted on 40 couples revealed that, for females, dyadic desire is positively correlated with relationship adjustment as measured by the Dyadic Adjustment Scale (Spanier, 1976; $r = .54$, $p < .001$), with sexual satisfaction as measured by the Index of Sexual Satisfaction (Hudson, Harrison, & Crosscup, 1981; $r = .63$, $p < .001$), with sexual daydreams as measured by the Sexual Daydreams Scale (Giambra, 1980; $r = .53$, $p < .001$), and with sexual arousal as measured by the Sexual Arousal Inventory (Hoon, Hoon, & Wincze, 1976; $r = .71$, $p < .001$). With males, dyadic sexual desire is only correlated with sexual satisfaction ($r = .36$, $p < .01$; Spector & Davies, 1995).

Gender differences have been noted on the SDI. Males have significantly higher levels of dyadic, $F(1, 374) = 5.79$, $p < .05$, and solitary, $F(1, 376) = 55.15$, $p < .0001$, desire than do females. This difference is also found in geriatric samples (Spector & Fremeth, 1996).

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Exhibit

Sexual Desire Inventory—2

This questionnaire asks about your level of sexual desire. By desire, we mean interest in or wish for sexual activity. For each item, please circle the number that best shows your thoughts and feelings. Your answers will be private and anonymous.

1. During the last month, *how often* would you *have liked* to engage in sexual activity with a partner (for example, touching each other's genitals, giving or receiving oral stimulation, intercourse, etc.)?

   ○ Not at all
   ○ Twice a week

- ○ Once a month
- ○ 3 to 4 times a week
- ○ Once every two weeks
- ○ Once a day
- ○ Once a week
- ○ More than once a day

2. During the last month, *how often* have you had sexual thoughts involving a partner?

- ○ Not at all
- ○ 3 to 4 times a week
- ○ Once or twice a month
- ○ Once a day
- ○ Once a week
- ○ A couple of times a day
- ○ Twice a week
- ○ Many times a day

3. When you have sexual thoughts, *how strong* is your desire to engage in sexual behavior with a partner?

No Desire 0	1	2	3	4	5	6	7	Strong Desire 8
○	○	○	○	○	○	○	○	○

4. When you first see an attractive person, *how strong* is your sexual desire?

No Desire 0	1	2	3	4	5	6	7	Strong Desire 8
○	○	○	○	○	○	○	○	○

5. When you spend time with an attractive person (for example, at work or school), *how strong* is your sexual desire?

No Desire 0	1	2	3	4	5	6	7	Strong Desire 8
○	○	○	○	○	○	○	○	○

6. When you are in romantic situations (such as a candle-lit dinner, a walk on the beach, etc.), *how strong* is your sexual desire?

No Desire 0	1	2	3	4	5	6	7	Strong Desire 8
○	○	○	○	○	○	○	○	○

7. *How strong* is your desire to engage in sexual activity with a partner?

No Desire 0	1	2	3	4	5	6	7	Strong Desire 8
○	○	○	○	○	○	○	○	○

8. *How important* is it for you to fulfill your sexual desire through activity with a partner?

Not at all important 0	1	2	3	4	5	6	7	Extremely important 8
○	○	○	○	○	○	○	○	○

9. Compared to other people of your age and sex, how would you rate your desire to behave sexually with a partner?

Much less desire 0	1	2	3	4	5	6	7	Much more desire 8
○	○	○	○	○	○	○	○	○

10. During the last month, *how often* would you *have liked* to behave sexually by yourself (for example, masturbating, touching your genitals etc.)?

- ○ Not at all
- ○ Once a month
- ○ Once every two weeks
- ○ Once a week
- ○ Twice a week
- ○ 3 to 4 times a week
- ○ Once a day
- ○ More than once a day

11. *How strong* is your desire to engage in sexual behavior by yourself?

No Desire 0	1	2	3	4	5	6	7	Strong Desire 8
○	○	○	○	○	○	○	○	○

12. *How important* is it for you to fulfill your desires to behave sexually by yourself?

Not at all important 0	1	2	3	4	5	6	7	Extremely important 8
○	○	○	○	○	○	○	○	○

13. Compared to other people of your age and sex, how would you rate your desire to behave sexually by yourself?

Much less desire 0	1	2	3	4	5	6	7	Much more desire 8
○	○	○	○	○	○	○	○	○

14. How long could you go comfortably without having sexual activity of some kind?

- ○ Forever
- ○ A year or two
- ○ Several months
- ○ A month
- ○ A few weeks
- ○ A week
- ○ A few days
- ○ One day
- ○ Less than one day

13 Families and Sexuality

Parenting Outcome Expectancy Scale

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The purpose of the Parenting Outcome Expectancy Scale (POES) is to measure the parent's expectations about the outcomes associated with talking with his/her adolescent about sex-related topics.

The development of the POES was based on the concept of outcome expectancy (OE), a central construct of social cognitive theory (Bandura, 1997). Bandura defines an outcome expectation as a judgment of the likely consequences that result from performance of a behavior. He proposes that people who hold more positive views about behavioral performances are more likely to perform the behavior. In the present situation, a parent who believes that talking with his/her children about sexuality issues has positive outcomes would likely initiate such discussions. Bandura further describes three types of OE—self-evaluative, social, and physical. Self-evaluative OE relates to personal reactions; social OE relates to the reactions of others; and physical OE addresses sensory effects related to a behavior. The POES includes items measuring only self-evaluative and social OE because there are no direct physical OEs that can be associated with discussions about sexuality.

Development

For the development of the POES, outcome expectancy was defined as the parent's expectations about the outcomes associated with talking with his/her adolescent about sex-related topics. The original 15 POES items were written following a review of the literature and focus group discussions with parents of adolescents (DiIorio et al., 2001). Content and measurement specialists reviewed the wording of each item and the consistency of the idea presented in each item with the concept of OE as defined by Bandura (1997). Based on their reviews, all 15 items were retained for the final version with some minor changes in wording.

To assess the underlying dimensions of the POES, an exploratory maximum likelihood common factor analysis with oblique rotation was conducted. The initial analysis revealed four factors with eigenvalues greater than 1.0 and explaining 59.6 percent of the variance. Only one item loaded on Factor 4. Thus, a second analysis was conducted requesting three factors. The resulting three factors provided a better interpretation of the data and together accounted for 52.6 percent of the variance. The self-evaluative items were divided across two factors with one factor representing a *cognitive self-evaluative* component (three items) and the second factor, an *emotional self-evaluative* component (six items). The third factor represented a *social* component (six items). The underlying theme of the strongest factor, *cognitive self-evaluation*, seemed to be responsibility. The second factor related to *emotional self-evaluation* of discussions and consisted of six items about feelings of embarrassment, discomfort, and difficulty discussing some topics. The third factor, *social* OE, related to discussions with adolescents.

Because the *cognitive self-evaluative* OE factor had only three items and the *social* OE factor had a slightly less than adequate reliability coefficient, eight new items were written. One item was written to measure cognitive self-evaluative OE and seven items to measure social OE. The addition of these eight items increased the total number of POES items to 23.

Response Mode and Timing

Each item is rated on a 5-point Likert scale ranging from (1) *Strongly Disagree* to (5) *Strongly Agree*. Each item begins with the stem "If I talk with [my child] about sex topics." For paper versions, the stem of each item (If I talk with my child about sex topics) can be placed at the top of the list of items and deleted from each of the statements. In an interview situation or when using computer-assisted interviewing, the name of the child can be substituted by the interviewer/computer for [my child].

The POES takes about 5 to 10 minutes to complete. The items do not usually require explanation.

Scoring

Fifteen of the 23 items are positively worded, and 8 are negatively worded. The negatively worded items are reverse

coded prior to summing the items. A total score is found by summing responses to the 23 individual items. Total scale scores range from 23 to 115, with higher scores indicating more positive outcome expectancies.

Reliability

The 15-item POES was assessed for reliability using scale responses from a sample of 491 mothers of 11- to 14-year-old adolescents (DiIorio et al., 2001). Cronbach's alpha for the total POES was .83, indicating an acceptable level of internal consistency among scale items. Item-to-total correlations ranged from .24 to .61, with a mean of .27. Means of individual items ranged from 3.15 to 4.50, with standard deviations ranging from .60 to 1.25. The item "*Your adolescent* will do what he/she wants no matter what you say" (the original form of Item 8) had the lowest item-to-total correlation and also demonstrated several weak (< .10) correlations with other items. The Cronbach's alphas for three subscales (*cognitive self-evaluative, emotional self-evaluative*, and *social*) resulting from a factor analysis of item responses were .82, .77, and .67, respectively, and indicated low to moderate levels of internal consistency. The 15-item POES was used in a study with mothers of 6- to 12-year-old children (Pluhar, DiIorio, & McCarty, 2008). Cronbach's alpha coefficient for responses from the 277 father participants was .85. The 23-item POES was used in a randomized controlled study of an HIV prevention intervention for fathers and their adolescent boys. Cronbach's alpha coefficient for responses from the 277 father participants was .83 (DiIorio, McCarty, & Denzmore, 2006).

Validity

The 15-item POES was assessed for validity using the same sample of 491 mothers as was used for initial reliability assessment (DiIorio et al., 2001). Construct validity was assessed by examining the association of the total POES scores with the theoretically relevant variables of sex-based communication, general communication, parenting, and self-esteem. All correlations between the POES and these scales were significant and in the predicted directions. Further analysis indicated that mothers of daughters reported higher levels of parenting OE than did mothers of sons, as was expected based on the literature.

In a descriptive study of correlates of sexuality communication, the POES was significantly and positively correlated with sexuality discussions, meaning that mothers who had more positive OE were more likely to talk with their children about sexuality issues (Pluhar et al., 2008).

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Exhibit

Parenting Outcome Expectancy Scale

Read these statements about talking with your child about sex. Talking with your child about sex includes topics such as how babies are made, names of the genitals, physical changes of puberty, menstruation, wet dreams, waiting to have sex until your child is older, birth control, and HIV or AIDS. For each statement, state how much you agree or disagree.

	1 Strongly Disagree	2 Disagree	3 Neither Disagree nor Agree	4 Agree	5 Strongly Agree
1. If I talk with [my child] about sex topics, I will feel proud.	○	○	○	○	○
2. If I talk with [my child] about sex topics, I will feel like a responsible parent.	○	○	○	○	○
3. If I talk with [my child] about sex topics, I will feel that I did the right thing.	○	○	○	○	○
4. If I talk with [my child] about sex topics, I will be embarrassed.	○	○	○	○	○
5. If I talk with [my child] about sex topics, I will find some things difficult to talk about.	○	○	○	○	○
6. If I talk with [my child] about sex topics, I think [my child] will listen.	○	○	○	○	○

7. If I talk with [my child] about sex topics, I will feel comfortable.	○	○	○	○	○
8. If I talk with [my child] about sex topics, [my child] will do what [my child] wants no matter what I say.	○	○	○	○	○
9. If I talk with [my child] about sex topics, I will feel ashamed.	○	○	○	○	○
10. If I talk with [my child] about sex topics, I think it will do some good.	○	○	○	○	○
11. If I talk with [my child] about sex topics, [my child] will be less likely to have sexual intercourse as a young teen.	○	○	○	○	○
12. If I talk with [my child] about sex topics, it would be unpleasant.	○	○	○	○	○
13. If I talk with [my child] about sex topics, [my child] will be less likely to get pregnant or get a girl pregnant.	○	○	○	○	○
14. If I talk with [my child] about sex topics, I will find these issues easy to talk about.	○	○	○	○	○
15. If I talk with [my child] about sex topics, I will feel relieved.	○	○	○	○	○
16. If I talk with [my child] about sex topics, [my child] will be embarrassed.	○	○	○	○	○
17. If I talk with [my child] about sex topics, [my child] will not want to talk to me.	○	○	○	○	○
18. If I talk with [my child] about sex topics, I will have done what parents should do.	○	○	○	○	○
19. If I talk with [my child] about sex topics, [my child] will remember the discussion when [my child] is older.	○	○	○	○	○
20. If I talk with [my child] about sex topics, [my child] will appreciate my willingness to provide further information.	○	○	○	○	○
21. If I talk with [my child] about sex topics, [my child] will be uncomfortable during the discussion.	○	○	○	○	○
22. If I talk with [my child] about sex topics, [my child] will be more able to resist peer pressure to have sex.	○	○	○	○	○
23. If I talk with [my child] about sex topics, [my child] will know where I stand on teens having sex.	○	○	○	○	○

Parenting Self-Efficacy Scale

Colleen DiIorio, *Emory University*

The purpose of the Parenting Self-Efficacy Scale (PSES) is to measure parents' confidence in their ability to talk to their children about sexuality issues.

Development

The development of the PSES was based on the concept of self-efficacy (SE), a central construct of social cognitive theory (Bandura, 1997). Bandura defined self-efficacy as the belief in personal capability to organize and execute behaviors. People who have strong beliefs in their abilities are more likely to perform behaviors and more likely to be successful. Applied to the situation of parent-child sexual communication, this means that parents who are confident that they can talk to their children about sexuality issues are more likely to do so.

Bandura (1997) noted that self-efficacy is specific to each behavior. Thus, self-efficacy scales based on his conceptualization must be behavior-specific. For the purpose of the development of the PSES, self-efficacy was defined as parents' overall belief in their capacity to talk with their children and adolescents about specific sex-related topics. Based on a literature review, three aspects of sex-based discussions were identified: (a) physiological processes (e.g., menstruation), (b) practical issues (e.g., where to get condoms), and (c) safer-sex messages (e.g., should use condoms if he/she decides to have sex). Sixteen items to measure self-efficacy related to these three aspects were

developed based on a literature review of sexuality discussions and on focus groups conducted with mothers of adolescents (DiIorio et al., 2001). Content and measurement specialists reviewed the wording of each item and the consistency of the idea presented in each item with the concept of SE as defined by Bandura. Based on their reviews, all 16 items were retained for the final version with some minor changes in wording.

To assess the underlying dimensions of the PSES, an exploratory maximum likelihood common factor analysis with oblique rotation was conducted. The initial analysis revealed three factors with eigenvalues greater than 1.0 and explaining 51 percent of the variance. Only one item loaded on Factor 3. Thus, a second analysis was conducted requesting two factors. The resulting two factors provided a better interpretation of the data and together accounted for 44 percent of the variance. The first factor was composed of 10 items representing all three pre-specified aspects of sex-based discussions—physiological events, practical issues, and safer-sex messages and was labeled Basic Information. The second factor was named Relationship-Based Information, because it was composed of six items addressing relationship issues such as how to encourage a partner to wait, how to tell a partner no, and how to have fun without sex. Because the Relationship-Based Information factor had a slightly less than adequate reliability coefficient (.67), one new item was written to further define the factor. Thus, the current PSES has 17 items.

Response Mode and Timing

Each item is worded positively and rated on a 7-point scale anchored with the terms (1) *Not Sure at all* and (7) *Completely Sure*. The midpoint of the scale is defined as *Moderately Sure*. Each item begins with the stem "I can always explain to [my child] . . ." In an interview situation or when using computer-assisted interviewing, the name of the child can be substituted by the interviewer/computer for [my child]. The PSES takes about 5–10 minutes to complete. The items do not usually require explanation.

Scoring

All 17 items are positively worded. Total scores are found by summing responses to individual items. Total possible scores range from 17 to 119 with higher scores corresponding to a higher degree of self-efficacy to discuss sex-related issues with adolescents.

Reliability

The original 16-item PSES was assessed for reliability using scale responses from a sample of 491 mothers of 11- to 14-year-old adolescents (DiIorio et al., 2001). Cronbach's alpha for the total PSES was .85, indicating a moderately high level of internal consistency among scale items. The mean inter-item correlation was .28, with item-to-total correlations ranging from .24 to .61. Means of individual items ranged from 4.46 to 6.76 with standard deviations ranging from .78 to 2.25. The Cronbach's alphas for two subscales (Basic Information and Relationship-Based Information) were .84 and .67 and indicated low to moderate levels of internal consistency.

The 16-item POES was used in a study with mothers of 6- to 12-year-old children (Pluhar, DiIorio, & McCarty, 2008). Cronbach's alpha coefficient for responses from the 277 father participants was .94. The 17-item PSES was used in a randomized controlled study of an HIV prevention intervention for fathers and their adolescent boys. Cronbach's alpha coefficient for responses from the 277 father participants was .85 (DiIorio, McCarty, & Denzmore, 2006).

Validity

The 16-item PSES was assessed for validity using the same sample of 491 mothers as used for initial reliability assessment (DiIorio et al., 2001). Construct validity was assessed by examining the association of the total PSES scores with the theoretically relevant variables of sex-based communication, general communication, parenting, and self-esteem. All correlations between the PSES and these scales were significant and in the predicted directions. Further analysis revealed that mothers of daughters reported higher levels of parenting SE than did mothers of sons, as was expected based on the literature. In a descriptive study of correlates of sexuality communication, the PSES was significantly and positively correlated with sexuality discussions, meaning that mothers who had more positive SE were more confident in talking with their children about sexuality issues (Pluhar et al., 2008).

Other Information

The format of the scale can be modified to use with computer-assisted interview (CAI) programs or face-to-face interviews. If used with CAI programs, the term [my child] can be linked with the child's first name and appear in each item as it is presented on the screen. For paper versions, the stem of each item (I can always explain to [my child]) can be placed at the top of the list of items and deleted from each of the statements.

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Exhibit

Parenting Self-Efficacy Scale

Read each statement about talking to your child about sexuality issues. Then choose a number on the scale from 1 (*Not Sure at all*) to 7 (*Completely Sure*) to say how sure you are about your ability to talk about each topic with [my child] as he/she grows up. Remember, 1 means *Not Sure at all*, 4 means *Moderately Sure*, and 7 means *Completely Sure*. You can also answer with the numbers in between. For example, a 5 or 6 would mean somewhere between *Moderately Sure* and *Completely Sure*.

	1 Not Sure at all	2	3	4 Moderately Sure	5	6	7 Completely Sure
1. I can always explain to [my child] what is happening when a girl has her period.	○	○	○	○	○	○	○
2. I can always explain to [my child] why a person should use a condom when he or she has sex.	○	○	○	○	○	○	○
3. I can always explain to [my child] ways to have fun without having sexual intercourse.	○	○	○	○	○	○	○
4. I can always explain to [my child] why [my child] should wait until [my child] is older to have sexual intercourse.	○	○	○	○	○	○	○
5. I can always explain to [my child] that [my child] should use condoms if [my child] decides to have sexual intercourse.	○	○	○	○	○	○	○
6. I can always explain to [my child] why wet dreams occur.	○	○	○	○	○	○	○
7. I can always explain to [my child] how to put on a condom.	○	○	○	○	○	○	○
8. I can always explain to [my child] how to use birth control pills.	○	○	○	○	○	○	○
9. I can always explain to [my child] how birth control pills keep girls from getting pregnant.	○	○	○	○	○	○	○
10. I can always explain to [my child] what I think about young teens having sex.	○	○	○	○	○	○	○
11. I can always explain to [my child] how to tell someone no if [my child] does not want to have sex.	○	○	○	○	○	○	○
12. I can always explain to [my child] how to make a partner wait until [my child] is ready to have sex.	○	○	○	○	○	○	○
13. I can always explain to [my child] how someone can get AIDS if they don't use a condom.	○	○	○	○	○	○	○
14. I can always explain to [my child] where to buy or get condoms.	○	○	○	○	○	○	○
15. I can always explain to [my child] where to buy or get birth control pills.	○	○	○	○	○	○	○
16. I can always explain to [my child] how to tell if a girl or boy really loves [my child].	○	○	○	○	○	○	○
17. I can always explain to [my child] how to resist peer pressure to have sex.	○	○	○	○	○	○	○

Family Life Sex Education Goal Questionnaire III

Steven Godin,[1] *University of Utah School of Medicine*

The initial Family Life Sex Education Goal Questionnaire (FLSE-GQ) was developed in the early 1980s as a needs assessment instrument designed to assess the attitudes of school personnel and community members toward the various goals of family life and sex education in the public schools. The FLSE-GQ-III is an updated version that includes additional items relevant for assessing family life sexuality education needs in today's public school systems. Outcome research has demonstrated that comprehensive sexuality education programs have a positive impact on delaying initiation of sexual behavior, reducing number of new sexual partners, and incidence of unprotected sexual intercourse, to name a few (Alford, 2003, 2008; Kirby, 2001, 2007; Kirby, Laris, & Rolleri, 2005; Kohler, Manhart, & Lafferty, 2008). Despite past federal governmental efforts to fund abstinence-based sex education, the Government Accountability Office Report (2006) and the Waxman Report (2004) suggest little evidence to date has been documented demonstrating the efficacy of this approach. Most experts, professional organizations, and even parents located in conservative geographic regions, support comprehensive sexuality education (McKeon, 2006; Steadman, Crookston, Page, & Hall, 2014). For decades, school administrators and school boards have cautiously excluded more controversial goals in their sex education programs for fear of negative community reactions or resistance from teachers or other school personnel; however, there is evidence that negative attitudes are found mostly among a small but vocal minority (Scales, 1983). As the debate about what content should be included in family life sex education curricula, the majority of parents support a comprehensive approach (Bleakley, Hennessy, & Fishbein, 2006; Eisenberg, Bernat, Bearinger, & Resnick, 2008). The FLSE-GQ-III is an assessment tool which provides an empirical basis for determining local needs. By collecting data on a representative sample, one can measure the extent of school and community support for the various content areas of sex education while also offering a means of clarifying diverse attitudes and priorities.

Development

The three versions of the FLSE-GQ have been used with 4 major samples: 337 elementary and high school teachers, 248 parents of elementary and high school children in the midwestern United States, 175 high school teachers, and 157 parents of high school children in the northeastern United States. Separate factor analyses were carried out on the 65 goal items from the teacher and parent samples. These analyses identified five Goal dimensions or themes common to both samples: (a) facilitating sexual decision making and life skills; (b) teaching about male and female physical development; (c) encouraging respect for diversity; (d) providing secondary prevention (e.g., to help pregnant girls to stay in school); and (e) teaching about the family and integrating sexuality in personal growth. Within the Midwest sample, Sexual Decision Making and Life Skills was the largest factor (31% of the variance) with parent participants, whereas Family Life and Personal Growth were the largest factors (30% of the variance) in the teacher sample. Within the Northeast sample, Sexual Decision Making and Life Skills was the sole large factor (32% of the variance). The remaining goal dimensions were minor goal dimensions in both samples (4% to 9% of the variance). The five scales of the short form correspond to each of the common goal dimensions and include items that had Varimax factor loadings of .5 or greater on corresponding factors in both the parent and teacher samples.

Response Mode and Timing

The instrument has a long and a short from. The long form consists of 65 goal items, and the short form consists of 20 goal items. The readability index for both forms of this instrument is at the 11.2 grade level. Items on both forms have a 5-point Likert-type response format with response options labeled from 1 (*Very Unimportant*) to 5 (*Very Important*). Respondents select the number indicating the relative importance of each goal item for a family life sex education program. The long form takes 30 to 40 minutes for the parents to complete, and somewhat less time for the teachers. Due to the length of the long form, the short form may be more appropriate for some parent groups. Researchers should consider the degree of literacy, interest, and so forth, in the population to be sampled in determining which version to use.

Scoring

Investigators working with large samples will probably want to score the long form of the FLSE-GQ III by subjecting the importance ratings for all 65 items to a principal components factor analysis. This procedure avoids any a priori assumptions about the salient goal dimensions within a particular population. The investigators can then derive scores for each goal dimension either by using computer-generated factor scores or by adding the importance ratings for the items

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with highest leadings on each factor. Investigators working with smaller samples and/or preferring the short form of the FLSE-GQ III can derive scores for the *Sexual Decision Making* (Items 8, 10, 17, 18, 21, 45), *Physical Development* (Items 33, 34, 46), *Respect for Diversity* (Items 47, 49, 54), *Secondary Prevention* (Items 40, 50, 65), and *Family Life and Personal Growth* (Items 16, 20, 22, 23, 62) scales by adding responses for each scale item and dividing by the total number of scale items.

Reliability and Validity

Cronbach's alphas for the five goal dimensions from the long form ranged from .60 to .79 for the sample of teachers and from .65 to .85 for the sample of parents. Alphas for the five scales from the short form ranged from .73 to .83 for the sample of teachers and from .79 to .87 for the sample of parents. Although the alphas are slightly higher for the short form, researchers may want to use the longer form to assess whether new goal dimensions exist for the specific population. The questionnaire has been used to identify school personnel and community member goals for a Family Life Sex Education program in a number of urban, suburban and rural areas. Frank, Godin, Jacobson, and Sugrue (1982) and Godin, Frank, and Jacobson (1984) assessed relationships between Goal dimensions derived from the long form of the FLSE-GQ-II and the teachers' and parents' demographic characteristics (i.e., age, sex, race, and religiosity). Among the teachers, religiosity was the best predictor of differing attitudes toward the goals of family life sex education in the public schools, whereas among the parents, both religiosity and race contributed significantly to attitude differences. Both parents and teachers rated sexual decision-making goals as significantly less important than the other goal dimensions, contributing to the greater controversy surrounding this topic area in family life sex education. Within the Northeast sample, parents and teachers were in agreement regarding the high importance of sexual decision making and life skills, whereas there were significant differences in importance ratings related to the minor factors (Razzano & Godin, 2006).

Other Information

Versions of the Family Life Sex Education Goal Questionnaires were copyrighted in 1985, 1994, 2006, and 2011.

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Exhibit

Family Life Sex Education Goal Questionnaire III

This questionnaire lists goals which some people have described as *important* for a family life sex education program. Some goals may be viewed of lesser importance than others. For each of the goals listed, we would like you to indicate (on the 5-point scale provided) whether or not you view the goal as important for a family life sex education program in the _____ (specify program, school, grade level, etc).

Instructions: In the column to the right of the goals listed on the pages which follow, indicate the importance of each goal by using the following scale. Here is an example of how to use the scale:

Example Items

A. To teach children about how to stay physically healthy as they grow.
B. To teach children how to use a calculator.

If in your opinion, the first goal ("To teach children about how to stay physically healthy as they grow") is somewhat important (number "4" on the scale) for a family life sex education program, you would select "4" next to the goal statement in the column on the right. If, in your opinion, the second goal ("to teach children how to use a calculator") is very unimportant for a family life sex education program, you would select the number "1" in the column to the right. Remember, you may see some goals as more important than others.

Please select the number that best represents your views beside each goal statement.

	1 Very Unimportant	2 Somewhat Unimportant	3 Neutral Importance	4 Somewhat Important	5 Very Important
1. To help adolescents feel good about their physical appearance.	○	○	○	○	○
2. To help adolescents to appreciate their special qualities and personality as well as that of other boys and girls.	○	○	○	○	○
3. To reduce guilt and fear about sexuality.	○	○	○	○	○
4. To provide information about abnormal sexual development and behavior.	○	○	○	○	○
5. To help adolescents understand how sexual development affects other aspects of personal growth and development.	○	○	○	○	○
6. To provide complete information about male and female genitalia (sex organs) and other physical differences between men and women.	○	○	○	○	○
7. To involve parents in selecting instruction materials and planning the curriculum of the family life sex education program.	○	○	○	○	○
8. To provide information about abortion and its effects on the body.	○	○	○	○	○
9. To provide information about the biology of human reproduction and birth.	○	○	○	○	○
10. To discuss ways of coping with an unexpected pregnancy.	○	○	○	○	○
11. To help adolescents develop skills in getting along with members of the opposite sex.	○	○	○	○	○
12. To provide information about how to be good parents.	○	○	○	○	○
13. To help adolescents learn to understand and communicate with each other better.	○	○	○	○	○
14. To make youth aware of community services related to health and prenatal care.	○	○	○	○	○
15. To emphasize the importance of the family as the keystone of American life.	○	○	○	○	○
16. To help adolescents understand their responsibilities to self, family, and friends as they grow up.	○	○	○	○	○

17. To inform youth of community services related to birth control and sexual decision-making.	○	○	○	○	○
18. To counsel adolescents to make their own decisions about how far to go in their sexual activities.	○	○	○	○	○
19. To encourage adolescents to talk more openly with their parents about sexuality.	○	○	○	○	○
20. To discuss the role of the family in personal growth and development.	○	○	○	○	○
21. To encourage adolescents to use contraceptives if they decide to have sexual intercourse.	○	○	○	○	○
22. To discuss ways in which families work out conflicts and solve problems.	○	○	○	○	○
23. To help adolescents understand people's feelings and points of view.	○	○	○	○	○
24. To educate adolescents about peer pressure and how to deal with it.	○	○	○	○	○
25. To provide information about sexually transmitted infections including HIV and AIDS.	○	○	○	○	○
26. To teach about abstention as a form of contraception.	○	○	○	○	○
27. To teach students that masturbation is a normal sexual behavior.	○	○	○	○	○
28. To encourage discussion of personal family experiences in the classroom.	○	○	○	○	○
29. To provide special courses about family life and sexuality for disabled students.	○	○	○	○	○
30. To encourage adolescents to think about alternatives to abortion.	○	○	○	○	○
31. To bring in outside speakers to talk to youth about sexuality.	○	○	○	○	○
32. To counsel boys who are expectant fathers.	○	○	○	○	○
33. To correct myths and misinformation about the body.	○	○	○	○	○
34. To help adolescents to view the growth changes in their bodies as normal and healthy.	○	○	○	○	○
35. To discuss how the attitudes toward growth and development may be different for different ethnic groups and cultures in our society.	○	○	○	○	○
36. To provide information about alternative sexual behaviors and lifestyles, such as homosexuality.	○	○	○	○	○
37. To discuss abortion as a form of contraception.	○	○	○	○	○
38. To provide workshops to assist parents in talking more openly with their adolescent children about sexuality.	○	○	○	○	○
39. To encourage grooming and thoughtfulness about personal appearance.	○	○	○	○	○
40. To counsel girls who are pregnant.	○	○	○	○	○
41. To demonstrate how to put on a condom using a plastic teaching model or banana.	○	○	○	○	○
42. To refer students with special needs to social service agencies.	○	○	○	○	○
43. To make adolescents aware of the negative effects of sex role stereotypes.	○	○	○	○	○

44.	To provide information about good prenatal care.	○	○	○	○	○
45.	To provide information about contraceptives and how they work, and describe their effects on the body.	○	○	○	○	○
46.	To teach about biological changes during puberty.	○	○	○	○	○
47.	To learn about different kinds of families in our society.	○	○	○	○	○
48.	To teach adolescents about vaccines to prevent sexually transmitted infections.	○	○	○	○	○
49.	To provide information about how different ethnic and cultural groups differ in sexual beliefs and behaviors.	○	○	○	○	○
50.	To provide individual counseling to students with low self-esteem or those who feel embarrassed about their bodies.	○	○	○	○	○
51.	To meet with parents about a child who is having difficulties with sexual issues and stresses.	○	○	○	○	○
52.	To teach about the different types of sexually transmitted infections or diseases.	○	○	○	○	○
53.	To teach students that homosexuality is another form of sexual orientation.	○	○	○	○	○
54.	To teach about how families may differ in how they make rules and decisions.	○	○	○	○	○
55.	To teach students about the ways in which HIV is transmitted.	○	○	○	○	○
56.	To help parents decide whether their child should become vaccinated to prevent sexually transmitted infections.	○	○	○	○	○
57.	To work with outside community agencies to provide discussion groups about sexuality and sexual decision-making.	○	○	○	○	○
58.	To help adolescents to see that most young people are going through many of the same things as they grow toward maturity.	○	○	○	○	○
59.	To help adolescents plan for and start working toward future goals.	○	○	○	○	○
60.	To provide information about the roles and challenges that go along with reaching different ages in life.	○	○	○	○	○
61.	To teach students about ways to have safer sex to reduce the risk of HIV infection.	○	○	○	○	○
62.	To discuss ways to help families talk more openly and improve family communication.	○	○	○	○	○
63.	To listen and respond to the opinions of the outside community and local interest groups in making family life sex education goals.	○	○	○	○	○
64.	To encourage personal hygiene.	○	○	○	○	○
65.	To encourage pregnant girls to stay in school and to provide special classes for them in prenatal care.	○	○	○	○	○

Perceived Parental Reactions Scale

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The Perceived Parental Reactions Scale (PPRS) is a 32-item scale which assesses gay, lesbian, and bisexual (LGB) individuals' perceptions of their parents' initial reactions to their coming out. It evaluates eight theoretical dimensions of perceived parental reactions, including negative shock, denial, anger, bargaining, depression, acceptance, general homophobia, and parent-focused concerns.

Maternal and paternal reactions are rated on separate versions of the scale, which are identical except for references to parent gender. Individuals are required to think back to the week their mother or father found out about their sexual orientation and indicate agreement or disagreement with several possible reactions (e.g., cried tears of sadness) using a 5-point Likert scale.

Development

The PPRS was developed on the basis of Weinberg's (1972) love versus conventionality theory and Savin-Williams's (2001) initial reactions model. The scale was initially developed to assess nine theoretical dimensions of parents' initial reactions to coming out, including negative shock, denial, anger, bargaining, depression, acceptance, general homophobia, parent-focused concerns, and child-focused concerns. Four items assess each dimension. Items assessing the child-focused dimension were later removed based on the results of the initial scale development study. Child-focused items were written to address parental responses of concern for their child (e.g., "My mother was worried about my chances of finding a relationship partner"), which were initially conceptualized as positive reactions from parents. However, these items did not correlate with the PPRS total as expected and lowered overall reliability estimates (i.e., alpha) in both the mother and the father versions of the scale. The result, therefore, was a 32-item scale assessing eight theoretical dimensions of perceived parental reactions.

Response Mode and Timing

During administration, individuals are asked to read the instructions carefully, and asked to respond to each item indicating their selection on the Likert-type scale. Respondents should complete the PPRS only if (a) they have directly disclosed their sexual orientation to a parent or (b) they have had direct discussion with a parent about their sexuality following the parent's discovery of their sexual orientation through other means (e.g., parent discovered gay material on the Internet, read a diary, or was told by someone else). It takes approximately 15 minutes to complete both the mother and the father versions of the PPRS.

Scoring

Before calculating the scale total, Items 1, 5, 8, and 10 are reverse scored. The PPRS total score is obtained by summing all items, with possible scores ranging from 32 to 160. Higher scores represent more negative perceived reactions from parents. Items assessing the various theoretical domains are as follows: *negative shock* (Items 13, 18, 23, 28), *denial* (Items 14, 19, 24, 29), *anger* (Items 15, 20, 25, 30), *bargaining* (Items 16, 21, 25, 31), *depression* (Items 17, 22, 26, 32), *acceptance* (Items 1, 5, 8, 10), *general homophobia* (Items 3, 6, 9, 11), and *parent-focused concerns* (Items 2, 4, 7, 12). Despite these various theoretical domains, the scale should be used as a whole, because factor analyses have not yet supported the use of individual domain scores as discrete subscales.

Reliability

The reliability of the PPRS has been examined in two independent empirical investigations. In the initial development study (Willoughby, Malik, & Lindahl, 2006), the PPRS was administered to 72 gay men (ages 18 to 26) recruited from LGB community- and university-based organizations. Participants were ethnically diverse (39% Hispanic, 39% White-Anglo European, 10% Caribbean/African American, 12% Mixed/Other). The majority of participants had completed some college or a bachelor's degree (83%), whereas others reported high school (15%) or elementary school (1%) as their highest level of education. Of the 72 respondents, 70 were out to their mothers and 45 were out to their fathers. Means and standard deviations for the PPRS total score were as follows: mother version $M = 90.16$, $SD = 35.21$; father version $M = 86.87$, $SD = 31.73$. In this study, all items on both the mother and

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the father versions of the PPRS showed item-total correlations of .40 or above and demonstrated good internal consistencies (mother version, α = .97, *n* = 70; father version, α = .97, *n* = 45). Using a subset of participants, both versions of the PPRS showed good test-retest reliability after a 14-day interval, mother version, *r*(17) = .97; father version, *r*(10) = .95.

The mother version of the PPRS was administered as part of a larger protocol examining the family and peer relationships of LGB young people. Participants included 81 young men (69%) and women (31%), who identified as gay, lesbian, bisexual, or queer. Ages ranged from 14 to 25 (*M* = 19.70, *SD* = 1.76), and the sample included young people from diverse ethnic backgrounds (54%White-Anglo European, 20% Hispanic/Latino, 14% African/Caribbean American, 6% Asian, and 6% Mixed/Other). Participants were recruited from LGB social and college groups, as well as via study advertisements and friend referrals. Of the 81 young people, 65 were out to their mother. In this sample, the mean of the PPRS total score was 89.64 (*SD* = 34.37). Similar to the development study, all items showed item-total correlations of .39 and above. Internal consistency was also adequate (α = .97, *n* = 65).

Validity

Initial evidence supports the construct validity of the PPRS. First, as reported by Willoughby et al. (2006), gay men reporting to have grown up in families with low cohesion (i.e., family togetherness) and low adaptability (i.e., family flexibility) reported greater negativity from parents at coming out. Further, gay men who reported coming from families with authoritarian parents endorsed greater negativity from parents at coming out, compared with men who reported having authoritative or indulgent parents. Regarding convergent validity, the PPRS is related to hypothetically similar constructs. For instance, the mother version of the PPRS was highly correlated ($r = .55$, $p < .001$) with the Family Reactions subscale of the Measure of Gay Related Stressors (Lewis, Derlega, Berndt, Morris, & Rose, 2001), a measure of LGB individuals' current perceptions of family rejection due to sexual orientation. Lastly, higher scores on the mother version of the PPRS were also found to relate to higher levels of youth internalizing symptoms, school problems, and depressive symptoms, as measured by the Behavior Assessment System for Children (Reynolds & Kamphaus, 2004).

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Exhibit

Perceived Parental Reactions Scale (Mother Version)

Instructions: Think only about *your mother* when filling out this questionnaire. Think back *to the week* when your mother first became aware of your sexual orientation. Read the following statements and indicate how much you agree or disagree with each statement by selecting a number. Remember, there are no correct or incorrect answers. These are your opinions.

The week when I *told* my mother I was gay/lesbian/bisexual (or when she *found out* I was gay/lesbian/bisexual) she …

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1. …supported me.	○	○	○	○	○
2. …was worried about what her friends and other parents would think of her.	○	○	○	○	○
3. …had the attitude that homosexual people should not work with children.	○	○	○	○	○
4. …was concerned about what the family might think of her.	○	○	○	○	○
5. …was proud of me.	○	○	○	○	○
6. …believed that marriage between homosexual individuals was unacceptable.	○	○	○	○	○
7. …was concerned about the potential that she wouldn't get grandchildren from me.	○	○	○	○	○
8. …realized I was still "me," even though I was gay/lesbian/bisexual.	○	○	○	○	○
9. …believed that homosexuality was immoral.	○	○	○	○	○

10.	…thought it was great.	○	○	○	○	○
11.	…would have had a problem seeing two homosexual people together in public.	○	○	○	○	○
12.	…was concerned about having to answer other people's questions about my sexuality.	○	○	○	○	○
13.	…kicked me out of the house.	○	○	○	○	○
14.	…didn't believe me.	○	○	○	○	○
15.	…yelled and/or screamed.	○	○	○	○	○
16.	…prayed to God, asking him to turn me straight.	○	○	○	○	○
17.	…blamed herself.	○	○	○	○	○
18.	…called me derogatory names, like "faggot" or "queer."	○	○	○	○	○
19.	…pretended that I wasn't gay/lesbian/bisexual.	○	○	○	○	○
20.	…was angry at the fact I was gay/lesbian/bisexual.	○	○	○	○	○
21.	…wanted me not to tell anyone else.	○	○	○	○	○
22.	…cried tears of sadness.	○	○	○	○	○
23.	…said I was no longer her child.	○	○	○	○	○
24.	…told me it was just a phase.	○	○	○	○	○
25.	…was mad at someone she thought had "turned me gay/lesbian/bisexual."	○	○	○	○	○
26.	…wanted me to see a psychologist who could "make me straight."	○	○	○	○	○
27.	…was afraid of being judged by relatives and friends.	○	○	○	○	○
28.	…severed financial support.	○	○	○	○	○
29.	…brought up evidence to show that I must not be gay/lesbian/bisexual, such as "You had a girlfriend/boyfriend; you can't be gay/lesbian/bisexual."	○	○	○	○	○
30.	…was mad at me for doing this to her.	○	○	○	○	○
31.	…wanted me not to be gay/lesbian/bisexual.	○	○	○	○	○
32.	…was ashamed of my homosexuality.	○	○	○	○	○

14 Gender (Clinical)

Cross-Gender Fetishism Scale

Ray Blanchard,[1] *University of Toronto*

The Cross-Gender Fetishism Scale (CGFS; Blanchard, 1985) is a measure (for males) of the erotic arousal value of putting on women's clothes, perfume, and make-up, and shaving the legs. The term *cross-gender fetishism* was coined by Freund, Steiner, and Chan (1982) to designate fetishistic activity that is accompanied by fantasies of being female and carried out with objects symbolic of femininity. It is therefore roughly equivalent to the term *transvestism* as defined in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980).

The CGFS is primarily intended to discriminate fetishistic from nonfetishistic cross-dressers (e.g., gender dysphorics, transsexuals, "drag queens," self-labeled transvestites). All items, however, contain one response option appropriate for non-cross-dressing males, so that it may be administered to control samples as well.

Response Mode and Timing

The scale is a self-administered, multiple-choice questionnaire. It contains 11 items: six with three response options and five with two options.

Examinees are instructed to endorse one and only one response option per item. Examinees are permitted to ask for clarification on the meaning of an item. The CGFS was intended to round out a larger battery of erotic preference and gender identity measures (see Freund & Blanchard, 2019) and should not, by itself, take longer than one or two minutes to complete.

Scoring

Scoring weights for response options were determined with the optimal scaling procedure for multiple-choice items outlined by Nishisato (1980). This procedure directly determines the set of scoring weights that optimizes the alpha reliability of a scale for a given population. This analysis, as well as others yielding the psychometric information reported below, was carried out on 99 adult male patients of the behavioral sexology department or gender identity clinic of a psychiatric teaching hospital. All had reported that they felt like females at least when cross-dressed, if not more generally.

The scoring weight for each response option is shown in Table 1. Because empirically derived scoring weights can vary from sample to sample, users might wish to substitute the scoring weights given here with a simple dichotomous scheme: 1 for each positive response and 0 for each negative one.

The total score is simply the (algebraic) sum of scores on the 11 individual items. Higher (i.e., more positive) scores indicate a more extensive history of cross-gender fetishism.

Reliability

Blanchard (1985), using the scoring weight presented here, found an alpha reliability coefficient of .95.

Validity

Blanchard (1985) found that two factors with eigenvalues greater than 1.0 emerged from principal components analysis, accounting for 68 percent and 9 percent of the total variance. The part-remainder correlations ranged from .56 to .89.

Blanchard (1985) demonstrated the expected strong association (within the clinical population previously

TABLE 1
Scoring Weights for the Cross-Gender Fetishism Scale

1. Yes (1.0) No (–1.1) Never (–1.1)	4. Yes (1.3) No (–.8) Never (–.8)	7. Yes (1.4) No (–.8)	10. Yes (1.2) No (–.8) Never (–.8)
2. Yes (1.5) No (–.7) Never (–.7)	5. Yes (1.1) No (–1.0)	8. Yes (1.5) No (–.7)	11. Yes (1.3) No (–.4)
3. Yes (1.2) No (–1.0) Never (–1.0)	6. Yes (1.7) No (–.4)	9. Yes (1.1) No (–1.0) Never (–1.0)	

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described) between high scores on the CGFS and heterosexual partner preference. Blanchard, Clemmensen, and Steiner (1985), predicting that heterosexual male gender patients motivated to create a favorable impression at clinical assessment would tend to minimize their history of fetishistic arousal in their self-reports, found a high significant correlation of –.48 between the CGFS and the Crowne-Marlowe Social Desirability Scale (Crowne & Marlowe, 1964). The correlation between these two measures among homosexual gender patients–who rarely or never have fetishistic histories–was virtually zero.

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Exhibit

Cross-Gender Fetishism Scale

The following questions ask about your experiences in dressing or making up as the opposite sex. These questions are meant to include experiences you may have had during puberty or early adolescence as well as more recent experiences.

Please select one and only one answer to each question. If you are not sure of the meaning of a question, you may ask the person giving the questionnaire to explain it to you. There is no time limit for answering these questions.

1. Have you ever felt sexually aroused when putting on women's underwear, stockings, or a nightgown?

   ○ Yes
   ○ No
   ○ Have never put on any of these

2. Have you ever felt sexually aroused when putting on women's shoes or boots?

   ○ Yes
   ○ No
   ○ Have never put on any of these

3. Have you ever felt sexually aroused when putting on women's jewelry or outer garments (blouse, skirt, dress, etc.)?

   ○ Yes
   ○ No
   ○ Have never put on any of these

4. Have you ever felt sexually aroused when putting on women's perfume or make-up, or when shaving your legs?

   ○ Yes
   ○ No
   ○ Have never done any of these

5. Have you ever masturbated while thinking of yourself putting on (or wearing) women's underwear, stockings, or nightgown?

   ○ Yes
   ○ No

6. Have you ever masturbated while thinking of yourself putting on (or wearing) women's shoes or boots?

   ○ Yes
   ○ No

7. Have you ever masturbated while thinking of yourself putting on (or wearing) women's jewelry or outer garments?

   ○ Yes
   ○ No

8. Have you ever masturbated while thinking of yourself putting on (or wearing) women's perfume or make-up, or while thinking of yourself shaving your legs (or having shaved legs)?

   ○ Yes
   ○ No

9. Has there ever been a period in your life of one year (or longer) during which you always or usually felt sexually aroused when putting on female underwear or clothing?

   ○ Yes
   ○ No
   ○ Have never put on female underwear or clothing

10. Has there ever been a period in your life of one year (or longer) during which you always or usually masturbated if you put on female underwear or clothing?

    ○ Yes
    ○ No
    ○ Have never put on female underwear or clothing

11. Have you ever put on women's clothes or make-up for the main purpose of becoming sexually excited and masturbating?

    ○ Yes
    ○ No

Gender Identity and Erotic Preference in Males

Kurt Freund
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This test package includes seven scales. Six of these are concerned with the assessment of erotic preference and erotic anomalies; one is concerned with the assessment of gender identity. This last instrument, in its present form and in earlier versions, has a longer history in the published literature than the other six. All seven instruments are intended for use with adult males.

The Feminine Gender Identity Scale (FGIS) was developed to measure that "femininity" occurring in homosexual males (Freund, Langevin, Satterberg, & Steiner, 1977; Freund, Nagler, Langevin, Zajac, & Steiner, 1974). There were two reasons to develop a special instrument to measure this attribute rather than rely upon conventional masculinity-femininity tests. First, conventional masculinity-femininity tests are usually assembled from items that are differentially endorsed by males and females. Such differential endorsement may reflect other differences between the sexes besides gender identity (e.g., body build and upbringing). Moreover, femininity in homosexual males need not be identical with what psychologically differentiates males from females. Therefore, rather than using biological females as a reference group, Freund identified the "feminine" behavioral patterns and self-reports of homosexual male-to-female transsexuals as the extreme of that femininity observable in homosexual males. Accordingly, feminine gender identity in males was conceived as a continuous variable, inferable from the extent of an individual's departure from the usual male pattern of behavior toward the pattern typical of male-to-female transsexuals.

The second reason for developing a new instrument was that conventional masculinity-femininity scales did not include those items pointed out by the classical sexologists (e.g., Hirschfeld and Krafft-Ebing) as indicative of femininity in homosexual males (e.g., whether, as a

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child, the subject had preferred to be in the company of males or females; whether he had preferred girls' or boys' games and toys). In Freund's clinical experience, such developmental items seemed to be of particular importance.

The item content of the six erotic interest scales was derived from Freund's clinical experience. The Androphilia and Gynephilia Scales were originally assembled to measure the extent of bisexuality reported by androphilic males and to measure the erotic interest in other persons reported by patients with cross-gender identity problems. The term *androphilia* refers to erotic attraction to physically mature males, and *gynephilia*, to erotic attraction to physically mature females. The Heterosexual Experience Scale was intended to assess sexual experience with women, as opposed to sexual interest in them. The Fetishism, Masochism, and Sadism Scales were constructed from face-valid items as self-report measures of these anomalous erotic preferences.

The interested reader should note the availability of certain closely related instruments. We have developed a companion instrument for the FGIS, the Masculine Gender Identity Scale for Females (Blanchard & Freund, 1983). Modifications of the Androphilia and Gynephilia Scales specifically intended for male patients with gender identity disorders have been developed by Blanchard (1985a, 1985b). Blanchard (1985a) includes a scale for measuring cross-gender fetishism (roughly transvestism), also reprinted in this volume.

All seven scales are presented in full (see Exhibit). The number of items in each scale is summarized in Table 1, along with the types and numbers of subjects used in item analysis, the alpha reliability of each scale, and the proportion of total variance accounted for by the largest single factor found with principal components analysis.

With the exception of the FGIS, all scales are appropriate for any adult male with sufficient reading comprehension. Part A of the FGIS, which was constructed by selecting items differentially endorsed by adult gynephiles and (nontranssexual) androphiles may also be administered to any adult male.

Parts B and C of the FGIS were constructed from items differentially endorsed by transsexual and nontranssexual homosexuals. Part B consists of three items, which also appear on the Androphilia Scale, and which presuppose homosexuality. Part B is only appropriate for homosexual subjects; hence the full scale (Parts A, B, and C) may only be administered to homosexual subjects: androphilic transsexuals, androphiles, homosexual hebephiles (men who erotically prefer pubescent males), or homosexual pedophiles (men who erotically prefer male children). Part C consists of items aimed at transsexualism and is appropriate for males presenting with any cross-gender syndrome, including transvestism.

Response Mode and Timing

Most of the scales are a mixture of dichotomous and multiple-choice items. Subjects check one and only one response option for each item. The shortest scale takes only a few minutes to complete; the longest (the full FGIS) takes about 15 minutes. Subjects are permitted to ask for clarification on any item whose meaning they do not understand.

Scoring

Scoring weights for each response option of each item follow that option in parentheses in the Exhibits. The total scores for each scale (and for the three subscales of the

TABLE 1
Psychometric Information

Scale[a]	*N* of items	Subjects used in item analysis[b]	*N* of subjects	Alpha[c]	Percent variance[d]
FGI(A)	19	CGI patients; andro patients; courtship disorder; sadists	743	.93	43.8
FGI(BC)	10	CGI patients; andro patients	332	.89	51.4
Andro	13	CGI patients; andro controls; andro patients; homo pedohebe	437	.93	59.8
Gyne	9	CGI patients; hetero controls; andro controls; andro patients; homo pedohebe; hetero pedohebe	605	.85	40.4
Het Exp	6	As above	606	.82	47.8
Fetish	8	CGI patients; hetero controls; andro controls; homo pedohebe; hetero pedohebe; courtship disorder; sadists; hyperdominants; masochists	444	.91	59.6
Maso	11	As above	491	.83	33.7
Sadism	20	As above	491	.87	28.0

Note. The FGI Scale data were prepared for this table by Blanchard. The data for the other six scales are from Freund, Steiner, and Chan (1982).
aFGI(A) = Feminine Gender Identity Scales for Males, Part A; FGI(BC) = Feminine Gender Identity Scale for Males, Parts B and C combined; Andro = Androphilia Scale; Gyne = Gynephilia Scale; Het Exp = Heterosexual Experience Scale; Fetish = Fetishism Scale; Maso = Masochism Scale; Sadism = Sadism Scale.
bCGI patients with cross-gender identity; courtship disorder, patients with voyeurism, exhibitionism, toucherism, frotteurism, obscene telephone calling, or the preferential rape pattern; pedohebe, pedophiles or hebephiles; hyperdominants, borderline sadists.
cCronbach's alpha reliability coefficient.
dPercentage of total variance accounted for by the strongest principal component.

FGIS) are obtained by totaling the subject's scores for each item in that scale (or subscale). For all scales, high scores indicate that the relevant attribute (e.g., sadism, feminine gender identity) is strongly present, and low scores indicate that it is absent.

Reliability

The alpha reliability coefficient of each scale is presented in Table 1. Test–retest reliabilities have never been computed.

Validity

The main line of evidence for the construct validity of the FGIS is the demonstration of reliable group differences among heterosexual, nontranssexual homosexual, and transsexual homosexual males. Two studies have cross-validated Part A of the most recent version of the FGIS (Freund et al., 1977) and have also shown the relative insensitivity of the scale to socioeconomic variables. Freund, Scher, Chan, and Ben-Aron (1982) found no difference in the FGIS scores of gynephilic prisoners (whose modal education was less than high school graduation) and gynephilic university students; both groups produced lower FGIS scores than a sample of androphilic volunteers, who, in turn, scored lower than androphilic male-to-female transsexuals.

Part A scores on the FGIS have also been shown to enter into orderly relationships with a variety of other sexological variables and questionnaire measures. Freund, Scher et al. (1982) found a positive correlation between the degree of homosexuals' femininity and the age group to which they are most attracted sexually. The androphilic subjects in this study produced higher FGIS scores than the homosexual hebephiles or pedophiles. The homosexual pedophiles did not differ in feminine gender identity from gynephiles. Freund and Blanchard (1983) found that those androphiles who produced the highest (most feminine) FGIS scores also tended to report the worst childhood relationships with their fathers. Blanchard, McConkey, Roper, and Steiner (1983) found a high negative correlation (–.71) between Part A of the FGIS and retrospectively reported boyhood aggressiveness, defined as a generalized disposition to engage in physically combative or competitive interactions with male peers.

Freund et al. (1977) reported a moderate correlation (.46) between Part A of the FGIS and the MMPI Masculinity-Femininity (Mf) Scale, and Hooberman (1979) reported a similar correlation (.52) between Part A of the 1974 version of the FGIS and the femininity scale of the Bem Sex-Role Inventory (BSRI; Bem, 1981). Hooberman (1979) did not report the correlation between the FGIS and the BSRI masculinity scale; presumably it was lower and not statistically significant. Guloien (1983) found a statistically significant negative correlation (–.20) between Part A of the FGIS and Jackson's (1974) social desirability scale in a mixed sample of heterosexual and homosexual male university students; Blanchard, Clemmensen, and Steiner (1985) found a significant positive correlation (.37) between Part A and the Crowne-Marlowe (Crowne & Marlowe, 1964) Social Desirability Scale among male patients at a gender identity clinic, most of whom were seeking sex reassignment surgery.

Freund, Scher et al. (1982) found that the Gynephilia and Heterosexual Experience Scales differentiated between two groups of androphiles, one claiming considerable, the other only minimal, bisexuality. The two scales discriminated between groups about equally well. Freund, Steiner, and Chan (1982) reported good agreement between clinicians' assessment of erotic partner preference (heterosexual vs. homosexual) and assessment by means of the Androphilia and Gynephilia Scales. They also found, among the various syndromes of cross-gender identity that they investigated, group differences in all seven measures presented here. Of particular interest was the confirmation they obtained with the Sadism, Masochism, and Fetishism Scales of their clinical impression that these anomalies tend to be differentially associated with heterosexual-type cross-gender identity.

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Exhibit

Gender Identity and Erotic Preference in Males

Feminine Gender Identity Scales for Males Part A

1. Between the ages of 6 and 12, did you prefer

   ○ to play with boys. (0)
   ○ to play with girls. (2)
   ○ didn't make any difference. (0)
   ○ not to play with other children. (1)
   ○ don't remember. (1)

2. Between the ages of 6 and 12, did you

   ○ prefer boys' games and toys (soldiers, football, etc.). (0)
   ○ prefer girls' games and toys (dolls, cooking, sewing, etc.). (2)
   ○ like or dislike both about equally. (1)
   ○ had no opportunity to play games or with toys. (1)

3. In childhood, were you very interested in the work of a garage mechanic? Was this

   ○ prior to age 6. (0)
   ○ between ages 6 and 12. (0)
   ○ probably in both periods. (0)
   ○ do not remember that I was very interested in the work of a garage mechanic. (1)

4. Between the ages of 6 and 14, which did you like more, romantic stories or adventure stories?

   ○ liked romantic stories more. (2)
   ○ liked adventure stories more. (0)
   ○ it did not make any difference. (1)

5. Between the ages of 6 and 12, did you like to do jobs or chores which are usually done by women?

   ○ yes. (2)
   ○ no. (0)
   ○ don't remember. (1)

6. Between the ages of 13 and 16, did you like to do jobs or chores which are usually done by women?

   ○ yes. (2)
   ○ no. (0)
   ○ don't remember. (1)

7. Between the ages of 6 and 12, were you a leader in boys' games or other activities?

   ○ more often than other boys. (0)
   ○ less often than other boys. (1)
   ○ about the same, or don't know. (0)
   ○ did not partake in children's games and/or other activities. (1)

8. Between the ages of 6 and 12, when you read a story did you imagine that you were

   ○ the male in the story (cowboy, detective, soldier, explorer, etc.). (0)
   ○ the female in the story (the girl being saved, etc.). (2)
   ○ the male sometimes and the female other times. (1)

- ○ neither the male nor the female. (1)
- ○ did not read stories. (1)

9. In childhood or at puberty, did you like mechanics magazines? Was this

- ○ between ages 6 and 12. (0)
- ○ between ages 12 and 14. (0)
- ○ probably in both periods. (0)
- ○ do not remember that I liked mechanics magazines. (1)

10. Between the ages of 6 and 12, did you wish you had been born a girl instead of a boy

- ○ often. (2)
- ○ occasionally. (1)
- ○ never. (0)

11. Between the ages of 13 and 16, did you wish you had been born a girl instead of a boy

- ○ often. (2)
- ○ occasionally. (1)
- ○ never. (0)

12. Since the age of 17, have you wished you had been born a girl instead of a boy

- ○ often. (2)
- ○ occasionally. (1)
- ○ never. (0)

13. Do you think your appearance is

- ○ very masculine. (0)
- ○ masculine. (0)
- ○ a little feminine. (1)
- ○ quite feminine. (2)

14. In childhood, did you sometimes imagine yourself a well-known sports figure, or did you wish you would become one? Was this

- ○ prior to age 6. (0)
- ○ between ages 6 and 12. (0)
- ○ probably in both periods. (0)
- ○ do not remember such fantasies. (1)

15. In childhood fantasies did you sometimes wish you could go hunting big game? Was this

- ○ prior to age 6. (0)
- ○ between ages 6 and 12. (0)
- ○ probably in both periods. (0)
- ○ do not remember such fantasies. (1)

16. In childhood fantasies did you sometimes imagine yourself as being a policeman or soldier? Was this

- ○ prior to age 6. (0)
- ○ between ages 6 and 12. (0)
- ○ probably in both periods. (0)
- ○ do not remember that I had such a fantasy. (1)

17. In childhood was there ever a period in which you wished you would, when adult, become a dressmaker or dress designer?

- ○ prior to age 6. (1)
- ○ between ages 6 and 12. (1)
- ○ probably in both periods. (1)
- ○ do not remember having this desire. (0)

18. In childhood fantasies did you sometimes imagine yourself driving a racing car? Was this

- ○ prior to age 6. (0)
- ○ between ages 6 and 12. (0)

- ○ probably in both periods. (0)
- ○ do not remember having this fantasy. (1)

19. In childhood did you ever wish to become a dancer? Was this

- ○ prior to age 6. (1)
- ○ between ages 6 and 12. (1)
- ○ probably in both periods. (1)
- ○ do not remember having this desire. (0)

Part B

20. What kind of sexual contact with a male would you have preferred on the whole, even though you may not have done it?

- ○ inserting your privates between your partner's upper legs (thighs). (0)
- ○ putting your privates into your partner's rear end. (0)
- ○ you would have preferred one of those two modes but you cannot decide which one. (0)
- ○ your partner putting his privates between your upper legs. (1)
- ○ your partner putting his privates into your rear end. (2)
- ○ you would have preferred one of these two latter modes but you cannot decide which one. (1)
- ○ you would have liked all four modes equally well. (1)
- ○ you would have preferred some other mode of sexual contact. (1)
- ○ had no desire for physical contact with males. (exclude subject)

21. What qualities did you like in males to whom you were sexually attracted?

- ○ strong masculine behavior. (2)
- ○ slightly masculine behavior. (1)
- ○ rather feminine behavior. (0)
- ○ did not feel sexually attracted to males. (exclude subject)

22. Would you have preferred a partner

- ○ who was willing to have you lead him. (0)
- ○ who was willing to lead you. (2)
- ○ you didn't care. (1)
- ○ did not feel sexually attracted to males. (exclude subject)

Part C

23. Between the ages of 6 and 12, did you put on women's underwear or clothing

- ○ once a month or more, for about a year or more. (2)
- ○ (less often, but) several times a year for about 3 years or more. (1)
- ○ very seldom did this during this period. (0)
- ○ never did this during this period. (0)
- ○ don't remember. (0)

24. Between the ages of 13 and 16, did you put on women's underwear or clothing

- ○ once a month or more, for about a year or more. (2)
- ○ (less often, but) several time a year for about 2 years or more. (1)
- ○ very seldom did this during this period. (0)
- ○ never did this during this period. (0)

25. Since the age of 17, did you put on women's underwear or clothing

- ○ once a month or more, for at least a year. (2)
- ○ (less often, but) several times a year for at least 2 years. (1)
- ○ very seldom did this during this period. (0)
- ○ never did this during this period. (0)

26. Have you ever wanted to have an operation to change you physically into a woman?

- ○ yes. (2)
- ○ no. (0)
- ○ unsure. (1)

27. If you have ever wished to have a female body rather than a male one, was this

    ○ mainly to please men but also for your own satisfaction. (2)
    ○ mainly for your own satisfaction but also to please men. (2)
    ○ entirely for your own satisfaction. (2)
    ○ entirely to please men. (1)
    ○ about equally to please men and for your own satisfaction. (2)
    ○ have never wanted to have a female body. (0)

28. Have you ever felt like a woman

    ○ only if you were wearing at least one piece of female underwear or clothing. (1)
    ○ while wearing at least one piece of female underwear or clothing and only occasionally at other times also. (1)
    ○ at all times and for at least 1 year (female clothing or not). (2)
    ○ never felt like a woman. (0)

29. When completely dressed in male clothing (underwear, etc.) would you

    ○ have a feeling of anxiety because of this. (2)
    ○ have no feeling of anxiety but have another kind of unpleasant feeling because of this. (2)
    ○ have no unpleasant feelings to do with above. (0)

Androphilia Scale

1. About how old were you when you first made quite strong efforts to see males who were undressed or scantily dressed?

    ○ younger than 12. (1)
    ○ between 12 and 16. (1)
    ○ older than 16. (1)
    ○ never. (0)

2. About how old were you when you first felt sexually attracted to males?

    ○ younger than 6. (1)
    ○ between 6 and 11. (1)
    ○ between 12 and 16. (1)
    ○ older than 16. (1)
    ○ never. (0)

3. Since what age have you been sexually attracted to males only?

    ○ younger than 6. (1)
    ○ between 6 and 11. (1)
    ○ between 12 and 16. (1)
    ○ older than 16. (1)
    ○ never. (0)

4. Since the age of 16, have you ever fallen in love with a person of the male sex?

    ○ yes. (1)
    ○ no. (0)

5. How old were you when you first kissed a male because you felt sexually attracted to him?

    ○ younger than 12. (1)
    ○ between 12 and 16. (1)
    ○ older than 16. (1)
    ○ never. (0)

6. Since age 12, how old were you when you first touched the privates of a male to whom you felt sexually attracted?

    ○ between 12 and 16. (1)
    ○ older than 16. (1)
    ○ never. (0)

7. What kind of sexual contact with a male would you have preferred on the whole, even though you may not have done it?

   - O inserting your privates between your partner's upper legs (thighs). (1)
   - O putting your privates into your partner's rear end. (1)
   - O you would have preferred one of those two modes but you cannot decide which one. (1)
   - O your partner putting his privates between your upper legs (thighs). (1)
   - O your partner putting his privates into your rear end. (1)
   - O you would have preferred one of those two latter modes but you cannot decide which one. (1)
   - O you would have liked all four modes equally well. (1)
   - O you would have preferred some other mode of sexual contact. (1)
   - O had no desire for physical contact with males. (0)

8. What qualities did you like in males to whom you were sexually attracted?

   - O strong masculine behavior. (1)
   - O slightly masculine behavior. (1)
   - O rather feminine behavior. (1)
   - O did not feel sexually attracted to males. (0)

9. Would you have preferred

   - O male homosexual partners. (1)
   - O male partners who were not homosexual. (1)
   - O had no preference. (1)
   - O did not feel sexually attracted to males. (0)

10. Since age 18, how old was the oldest male to whom you could have felt sexually attracted?

    - O younger than 6. (1)
    - O between 6 and 11. (1)
    - O between 12 and 16. (1)
    - O between 17 and 19. (1)
    - O between 20 and 30. (1)
    - O between 31 and 40. (1)
    - O between 41 and 50. (1)
    - O older than 50. (1)
    - O did not feel sexually attracted to males. (0)

11. Would you have preferred a partner

    - O who was willing to have you lead him. (1)
    - O who was willing to lead you. (1)
    - O you didn't care. (1)
    - O did not feel sexually attracted to males. (0)

12. Since age 16 and up to age 25 (or younger if you are less than 25) how did the preferred age of male partners change as you got older?

    - O became gradually younger. (1)
    - O became gradually older. (1)
    - O remained about the same. (1)
    - O never felt attracted to males. (0)

13. Since age 16, have you even been equally, or more, attracted sexually by a male age 17 and over than by females at 17–40?

    - O yes. (1)
    - O no. (0)

Gynephilia Scale

1. Since the age of 17 when you went dancing, was this to

   - O mainly meet girls at the dance. (1)
   - O mainly meet male friends at the dance. (0)

- ○ mainly because you liked dancing itself. (0)
- ○ never went dancing since age 17. (0)

2. How old were you when you first tried (on your own) to see females 13 or older naked or dressing or undressing (including striptease, movies or pictures)?

   - ○ younger than 12. (1)
   - ○ between 12 and 16. (1)
   - ○ older than 16. (1)
   - ○ never. (0)

3. Since age 13, have you ever fallen in love with or had a crush on a female who was between the ages of 13–40?

   - ○ yes. (1)
   - ○ no. (0)

4. Have you ever desired sexual intercourse with a female age 17–40?
   - ○ yes. (1)
   - ○ no. (0)

5. How do you prefer females age 17–40 to react when you try to come into sexual contact (not necessarily intercourse) with them?

   - ○ cooperation on the part of the female. (1)
   - ○ indifference. (1)
   - ○ a little resistance. (1)
   - ○ considerable resistance. (1)
   - ○ you don't care. (0)
   - ○ do not try to come into sexual contact with females age 17–40. (0)

6. Do you prefer females of age 17–40

   - ○ who have no sexual experience. (1)
   - ○ who have had a little experience. (1)
   - ○ who have had considerable experience. (1)
   - ○ you don't care how much experience. (1)
   - ○ not enough interest in females age 17–40 to know. (0)

7. Between 13 and 16, when you first saw females 13 or over in the nude (or dressing or undressing) including strip-tease, movies or picture, did you feel sexually aroused?

   - ○ very much. (1)
   - ○ mildly. (1)
   - ○ not at all. (0)
   - ○ never saw females 13 or over in the nude, dressing or undressing (including striptease, movies or pictures). (0)

8. When you have a wet dream (reach climax while dreaming), do you always, or almost always, dream of a female age 17–40?

   - ○ yes. (1)
   - ○ no. (0)
   - ○ don't remember any wet dreams. (0)

9. In your sexual fantasies, are females age 17–40 always, or almost always involved?

   - ○ yes. (1)
   - ○ no. (0)
   - ○ haven't had such fantasies. (0)

Heterosexual Experience Scale

1. Since age 13, how old were you when you first kissed a female age 13–40 who seemed to be interested in you sexually?

   - ○ between the ages 13–16. (1)
   - ○ between the ages 17–25. (1)
   - ○ 26 or older. (1)
   - ○ never after age 12. (0)

2. Since age 13, how old were you when you first petted (beyond kissing) with a female age 13–40 who seemed to be interested in you sexually?

   ○ between the ages 13–16. (1)
   ○ between the ages 17–25. (1)
   ○ 26 or older. (1)
   ○ never after age 12. (0)

3. Have you ever attempted sexual intercourse with a female age 17–40?

   ○ yes. (1)
   ○ no, and you are older than 25. (0)
   ○ no, and you are 25 or younger. (0)

4. When did you first have sexual intercourse with a female age 17–40?

   ○ before age 16. (1)
   ○ between 16 and 25. (1)
   ○ 26 or older. (1)
   ○ never, and you are older than 25. (0)
   ○ never, and you are 25 or younger. (0)

5. When did you first get married or begin living common-law?

   ○ before 30. (1)
   ○ between 30–40. (1)
   ○ age 41 or older. (1)
   ○ never married or had common-law relations, and you are older than 30. (0)
   ○ never, and you are 30 or younger. (0)

6. Was there any period of 14 days or less when you had sexual intercourse with a female age 17–40 more than 5 times?

   ○ yes. (1)
   ○ no, and you are older than 25. (0)
   ○ no, and you are 25 or younger. (0)

Fetishism Scale

1. Do you think that certain inanimate objects (velvet, silk, leather, rubber, shoes, female underwear, etc.) have a stronger sexual attraction for you than for most other people?

   ○ yes. (1)
   ○ no. (0)

2. Has the sexual attractiveness of an inanimate (not alive) thing ever increased if it had been worn by, or had been otherwise in contact with

   ○ a female. (1)
   ○ a male. (1)
   ○ preferably a female but also when in contact or having been in contact with a male. (1)
   ○ preferably a male but also when in contact or having been in contact with a female. (1)
   ○ a female or male person equally. (1)
   ○ contact between a person and a thing never increased its sexual attractiveness. (1)
   ○ do not feel sexually attracted to any inanimate thing. (0)

3. Did the sexual attractiveness to you of such a thing ever increase if you wore it or were otherwise in contact with it yourself?

   ○ yes. (1)
   ○ no. (0)
   ○ have never been sexually attracted to inanimate things. (0)

4. Were you ever more strongly sexually attracted by inanimate things than by females or males?

   ○ yes. (1)
   ○ no. (0)

5. What was the age of persons who most increased the sexual attractiveness for you of a certain inanimate object by their contact with it?

   ○ 3 years or younger. (1)
   ○ between 4 and 6 years. (1)
   ○ between 6 and 11 years. (1)
   ○ between 12 and 13 years. (1)
   ○ between 14 and 16 years. (1)
   ○ between 17 and 40 years. (1)
   ○ over 60 years. (1)
   ○ contact between a person and a thing never increased its sexual attractiveness. (1)
   ○ have never been sexually attracted to inanimate things. (0)

6. Is there more than one kind of inanimate thing which arouses you sexually?

   ○ yes. (1)
   ○ no. (0)
   ○ have never been sexually attracted to inanimate things. (0)

7. Through which of these senses did the thing act most strongly?

   ○ through the sense of smell. (1)
   ○ through the sense of taste. (1)
   ○ through the sense of sight. (1)
   ○ through the sense of touch. (1)
   ○ through the sense of hearing. (1)
   ○ have never been sexually attracted to inanimate objects. (0)

8. At about what age do you remember first having a special interest in an inanimate thing which later aroused you sexually?

   ○ younger than 2. (1)
   ○ between 2 and 4. (1)
   ○ between 5 and 7. (1)
   ○ between 8 and 10. (1)
   ○ between 11 and 13. (1)
   ○ older than 13. (1)
   ○ have never been sexually attracted to inanimate objects. (0)

Masochism Scale

1. If you were insulted or humiliated by a person to whom you felt sexually attracted, did this ever increase their attractiveness?

   ○ yes. (1)
   ○ no. (0)
   ○ unsure. (0)

2. Has imagining that you were being humiliated or poorly treated by someone ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

3. Has imagining that you had been injured by someone to the point of bleeding ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

4. Has imagining that someone was causing you pain ever aroused you sexually?

   ○ yes. (1)
   ○ no. (0)

5. Has imagining that someone was choking you ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

6. Has imagining that you have become dirty or soiled ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

7. Has imagining that your life was being threatened ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

8. Has imagining that someone was imposing on you heavy physical labor or strain ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

9. Has imagining a situation in which you were having trouble breathing ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

10. Has imagining that you were being threatened with a knife or other sharp instrument ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

11. Has imagining that you are being tied up by somebody ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

Sadism Scale

1. Did you ever like to read stories about or descriptions of torture?

   ○ yes. (1)
   ○ no. (0)

2. Did you usually re-read a description of torture several times?

   ○ yes. (1)
   ○ no. (0)
   ○ don't remember. (0)

3. Were you

   ○ very interested in descriptions of torture. (1)
   ○ a little interested. (0)
   ○ not at all interested. (0)
   ○ never read such descriptions. (0)

4. Between the ages of 13 and 16, did you find the sight of blood

   ○ exciting. (1)
   ○ only pleasant. (1)
   ○ unpleasant. (0)
   ○ did not affect you in any way. (0)

5. Has beating somebody or imagining that you are doing so ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

6. Have you ever tried to tie the hands or legs of a person who attracted you sexually?

   ○ yes. (1)
   ○ no. (0)

7. Has cutting or imagining to cut someone's hair ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

8. Has imagining that you saw someone bleeding ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

9. Has imagining someone being choked by yourself or somebody else ever excited you sexually?

   ○ yes. (1)
   ○ no. (0)

10. Has imagining yourself or someone else imposing heavy physical labor or strain on somebody ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

11. Has imagining that someone was being ill-treated in some way by yourself or somebody else ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

12. Has imagining that you or someone else were causing pain to somebody ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

13. Has imagining that you or somebody else were threatening someone's life ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

14. Has imagining that someone other than yourself was crying painfully ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

15. Has imagining that someone other than yourself was dying ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

16. Has imagining that you or someone else were making it difficult for somebody to breathe ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

17. Has imagining that you or someone else were tying up somebody ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

18. Has imagining that you or somebody else were threatening someone with a knife or other sharp instrument ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

19. Has imagining that someone was unconscious or unable to move ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

20. Has imagining that someone had a very pale and still face ever excited you sexually?

    ○ yes. (1)
    ○ no. (0)

Gender Identity Interview for Children

Kenneth J. Zucker,[3] *University of Toronto*

The 12-item Gender Identity Interview for Children (GIIC) (Zucker et al., 1993) is a structured interview schedule designed to measure children's gender identity with regard to both cognitive and affective components. It was originally developed for use for children referred clinically for gender identity (gender dysphoria) concerns, but it can also be used with non-clinical populations.

Development

The items were initially generated based on common expressions of gender dysphoria as seen clinically in pre-pubertal children, with regard to both cognitive and affective features. It was anticipated that the interview schedule could be used with children in the age range of 3–12 years. For example, a hypothesized "cognitive" item asked the child "Are you a boy or a girl?" and a hypothesized "affective" item asked the child "In your mind, do you ever think that you would like to be a girl [for birth-assigned males]/boy [for birth-assigned females]?" The hypothesized cognitive items were taken from Slaby and Frey's (1975) gender constancy interview and the hypothesized affective items were generated based on the clinical literature pertaining to children referred for possible gender dysphoria.

Zucker et al. (1993) administered the GIIC to 85 children referred clinically for concerns about their gender identity development (*M* age = 6.8 years; *SD* = 2.3) and 98 clinical and non-clinical control children (*M* age = 8.0 years; *SD* = 2.5). Factor-analysis identified a two-factor solution: Factor 1 (Affective) consisted of 7 items and Factor 2 (Cognitive) consisted of 4 items. One item did not load sufficiently on either factor. For Factor 1, factor loadings for the seven items ranged from .47 to .74; for Factor 2, factor loadings for the four items ranged from .59 to .93.

Response Mode and Timing

The measure is administered in a face-to-face interview with the child, after appropriate rapport is established. It can be completed in 10 minutes, if not less. For each item, the response options are on a 0–2 point scale, where 0 is considered a sex-typical response, 1 an intermediate or ambivalent response, and 2 a sex-atypical response (in relation to the child's sex assigned at birth). For example, if a birth-assigned male said "*No*" to the question "In your mind, do you ever think that you would like to be a girl?," the item would be scored as a 0; if the child said "*Sometimes*" or "*I don't know*," the item would be scored as a 1; if the child said "*Yes*," the item would be scored as a 2. Some of the items also allow the interviewer to ask for qualitative elaborations.

Scoring

For both factors, a mean score is calculated so the absolute range is 0.00–2.00. Because there is no reverse-coding, the syntax for the calculation of the items is straightforward. Factor 1 consists of Items 6 through 12 and Factor 2 consists of Items 1 through 4. For current use, it is recommended to use the two factors (Factor 1: Items 5–12; Factor 2: Items 1–4) and the total score as used in Wallien et al. (2009).

Validity

In Zucker et al. (1993), both factors significantly differentiated the children referred for gender identity concerns from the controls, with age and parent's marital status as covariates. Among the children referred for gender identity concerns, those who were threshold for the DSM-III-R diagnosis of Gender Identity Disorder of Childhood had a significantly higher score on Factor 1 compared to the children who were subthreshold.

In Wallien et al. (2009), the GIIC was administered to children referred for gender identity concerns in two clinics (in Toronto: *n* = 329; in Amsterdam: *n* = 228) and 173 control children (age range, 3–12 years). For the Dutch children, the GIIC was translated from English to Dutch and then back translated to ensure equivalency in meaning. Across the 12 items, interscorer reliability was examined for 95 participants and across the 12 items the median kappa value was .97. Confirmatory factor analysis (CFA) identified the same two factors reported in Zucker et al. (1993) except that in the CFA the one item that did not load sufficiently in the original study now had an acceptable factor loading on Factor 1. For Factor 1, the loadings ranged from .63 to .90; for Factor 2, the loadings ranged from .78 to .99. In Wallien et al. (2009), a total score was also calculated by summing the scores across the 12 items, so the absolute range was 0–24. The total score successfully discriminated the two gender identity groups from the controls and also distinguished the threshold vs. subthreshold gender-referred children using DSM-III-R or DSM-IV criteria for Gender Identity Disorder. Wallien et al. (2009) also provided data on sensitivity and specificity for "caseness" using a cut-off score of either 3+ or 4+ sex-atypical responses for the 12 items.

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The GIIC has been shown to have discriminant validity in other clinical populations (e.g., girls with congenital adrenal hyperplasia; Meyer-Bahlburg et al., 2004; Pasterski et al., 2015), concurrent validity with regard to other parameters of sex-typed behavior in childhood (Zucker et al., 1999), and predictive validity with regard to persistence vs. desistance of gender dysphoria in follow-up studies (Singh, 2012; Steensma, McGuire, Kreukels, Beekman, & Cohen-Kettenis, 2013).

Summary

The GIIC is a brief and transparent measure that can assess a child's gender identity/gender dysphoria in both clinical and non-clinical populations.

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Exhibit

Gender Identity Interview for Children

Girl Version

1. Are you a boy or a girl?
   - ○ Boy
   - ○ Girl
2. Are you a (opposite of first response)?
   - ○ No
   - ○ Sometimes/Maybe/I don't know
   - ○ Yes
3. When you grow up, will you be a Mommy or a Daddy?
   - ○ Mommy
   - ○ Sometimes/Maybe/I don't know
   - ○ Daddy
4. Could you ever grow up to be a (opposite of first response)?
   - ○ No
   - ○ Sometimes/Maybe/I don't know
   - ○ Yes
5. Are there any good things about being a girl?
   - ○ Yes
   - ○ Sometimes/Maybe/I don't know
   - ○ No

6. Are there any things that you don't like about being a girl?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ Yes

7. Do you think it is better to be boy or a girl?

   ○ Girl
   ○ Sometimes/Maybe/I don't know
   ○ Boy

8. In your mind, do you ever think that you would like to be a boy?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ No

9. In your mind, do you ever get mixed up and you're not really sure if you are a boy or a girl?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ Yes

10. Do you ever feel more like a boy than like a girl?

    ○ No
    ○ Sometimes/Maybe/I don't know
    ○ Yes

    You know what dreams are, right? Well, when you dream at night, are you ever in the dream?

    ○ Yes
    ○ No

11. In your dreams, are you a boy, a girl, or sometimes a boy and sometimes a girl?

    ○ Girl
    ○ Both
    ○ Boy
    ○ Not in dreams

12. Do you ever think that you really are a boy?

    ○ No
    ○ Sometimes/Maybe/I don't know
    ○ Yes

Boy Version

1. Are you a boy or a girl?

   ○ Boy
   ○ Girl

2. Are you a (opposite of first response)?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ Yes

3. When you grow up, will you be a Mommy or a Daddy?

   ○ Daddy
   ○ Sometimes/Maybe/I don't know
   ○ Mommy

4. Could you ever grow up to be a (opposite of first response)?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ Yes

5. Are there any good things about being a boy?

   ○ Yes
   ○ Sometimes/Maybe/I don't know
   ○ No

6. Are there any things that you don't like about being a boy?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ Yes

7. Do you think it is better to be boy or a girl?

   ○ Boy
   ○ Sometimes/Maybe/I don't know
   ○ Girl

8. In your mind, do you ever think that you would like to be a girl?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ Yes

9. In your mind, do you ever get mixed up and you're not really sure if you are a boy or a girl?

   ○ No
   ○ Sometimes/Maybe/I don't know
   ○ Yes

10. Do you ever feel more like a girl than like a boy?

    ○ No
    ○ Sometimes/Maybe/I don't know
    ○ Yes

    You know what dreams are, right? Well, when you dream at night, are you ever in the dream?

    ○ Yes
    ○ No

11. In your dreams, are you a boy, a girl, or sometimes a boy and sometimes a girl?

    ○ Boy
    ○ Both
    ○ Girl
    ○ Not in dreams

12. Do you ever think that you really are a girl?

    ○ No
    ○ Sometimes/Maybe/I don't know
    ○ Yes

Gender Identity Questionnaire for Children

Kenneth J. Zucker,[4] *University of Toronto*

The 16-item parent-reported Gender Identity Questionnaire for Children (GIQC; Johnson et al., 2004) is a parent-report questionnaire designed to measure gender role behaviors and gender identity (gender dysphoria) in children between the ages of 3–12 years. It was developed for use for children referred clinically for gender identity (i.e., gender dysphoria) concerns, but it can also be used with non-clinical populations.

Development

The items were initially generated based on common expressions of gender role behaviors which, on average, differentiate the behaviors of girls and boys, along with items pertaining to gender dysphoria (e.g., the wish to be of the other gender; anatomic dysphoria). A number of the items were taken from an earlier report by Elizabeth and Green (1984).

In Johnson et al. (2004), the GIQC was completed by 325 parents of gender-referred children (*M* age = 7.13 years; *SD* = 2.49) and by 504 parents of control children (siblings, clinic-referred, and non-referred; *M* age = 7.85 years; *SD* = 2.70). Factor-analysis identified a one-factor solution on which 14 of the 16 items had factor loadings >.30 (range = .34 to .91), accounting for 43.7 percent of the variance.

Response Mode and Timing

The measure can be completed in 5 to 10 minutes. For each item, the response options are on a 1–5-point scale, where 1 is considered a sex-atypical response. For 3 of the 14 items retained in the calculation of the factor score, there is an option equivalent to "*does not apply*." For example, regarding a child's favorite playmates (ranging from always boys to always girls), the option "does not play with other children" would be treated as missing.

Scoring

For the 14-item factor, a mean score is calculated so the absolute range is 1.00 to 5.00. Reverse coding is required for some of the items. For all 16 items, a = 1, b = 2, c = 3, d = 4, e = 5, f = leave blank. The mean score is the sum of Items 1–7, 9–15 and then divided by 14.

For the Boy Version, reverse code Items 1, 3, 6, 7, 11 so that a = 5, b = 4, c = 3, d = 2, and e = 1. For the Girl Version, reverse code Items 1, 2, 4, 5, 9, 10, 12 so that a = 5, b = 4, c = 3, d = 2, and e = 1.

Validity

In Johnson et al. (2004), the mean factor score significantly differentiated the gender-referred children (n = 325) from the controls (n = 504), with the former group having, as expected, a higher sex-atypical score. Cohen's d was 3.70. It was also shown that gender-referred children who met the complete DSM criteria for Gender Identity Disorder (the name of the diagnosis at that time; n = 216) had a higher sex-atypical score than gender-referred children who were subthreshold for the diagnosis (Cohen's d = 1.37, n = 109). With a specificity rate set at 95 percent (M > 3.54), this yielded a sensitivity rate of 86.8 percent for the gender-referred group. Cohen-Kettenis et al. (2006) confirmed the Johnson et al. (2004) findings in a sample of gender-referred children (N = 175) from the Netherlands.

Discriminant, Concurrent, and Predictive Validity

The GIQC has been shown to have both concurrent and predictive validity with regard to other parameters of sex-typed behavior in childhood (Fridell, Owen-Anderson, Johnson, Bradley, & Zucker 2006; Zucker et al., 1999) and predictive validity with regard to persistence vs. desistance of gender dysphoria in follow-up studies (Singh, 2012; Steensma, McGuire, Kreukels, Beekman, & Cohen-Kettenis, 2013). The GIQC has also been shown to have discriminant validity in other clinical populations (e.g., in children with disorders of sex development; Ediati et al., 2015; Gangaher, Chauhan, Jyotsna, & Mehta, 2016) and has been used to examine the potential effects of gestational exposure to phthalates (Percy et al., 2016).

Summary

The GIQC is a brief and transparent parent-report measure that can assess a child's gender identity/gender role behavior in both clinical and non-clinical populations.

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Exhibit

Gender Identity Questionnaire for Children

Name of child:

Who are you?

- ○ Mother
- ○ Father
- ○ Other

Male Version

Please answer the following behavioral statements as they currently characterize your child's behavior. For each question, select the response which most accurately describes your child.

1. His favorite playmates are:
   - ○ Always boys
   - ○ Usually boys
   - ○ Boys and girls equally
   - ○ Usually girls
   - ○ Always girls
   - ○ Does not play with other children
2. He plays with girl-type toys, such as "Barbie"
   - ○ As a favorite toy
   - ○ Frequently
   - ○ Once in a while
   - ○ Very rarely
   - ○ Never
3. He plays with boy-type dolls such as "G.I. Joe" or "Ken"
   - ○ As a favorite toy
   - ○ Frequently
   - ○ Once in a while

- ○ Very rarely
- ○ Never

4. He experiments with cosmetics (make-up) and jewelry

   - ○ As a favorite activity
   - ○ Frequently
   - ○ Once in a while
   - ○ Very rarely
   - ○ Never

5. He imitates *female* characters seen on TV or in the movies

   - ○ As a favorite activity
   - ○ Frequently
   - ○ Once in a while
   - ○ Very rarely
   - ○ Never

6. He imitates *male* characters seen on TV or in the movies

   - ○ As a favorite activity
   - ○ Frequently
   - ○ Once in a while
   - ○ Very rarely
   - ○ Never

7. He plays sports with boys (but not girls)

   - ○ As a favorite activity
   - ○ Frequently
   - ○ Once in a while
   - ○ Very rarely
   - ○ Never

8. He plays sports with girls (but not boys)

   - ○ As a favorite activity
   - ○ Frequently
   - ○ Once in a while
   - ○ Very rarely
   - ○ Never

9. In playing "mother/father," "house," or "school" games, he takes the role of

   - ○ A girl or woman at all times
   - ○ Usually a girl or woman
   - ○ Half the time a girl or woman and half the time a boy or man
   - ○ Usually a boy or man
   - ○ A boy or man at all times
   - ○ Does not play these games

10. He plays "girl-type" games (as compared to "boy-type" games)

    - ○ As a favorite activity
    - ○ Frequently
    - ○ Once in a while
    - ○ Very rarely
    - ○ Never

11. He plays "boy-type" games (as compared to "girl-type" games)

    - ○ As a favorite activity
    - ○ Frequently

- ○ Once in a while
- ○ Very rarely
- ○ Never

12. In dress-up games, he likes to dress up

- ○ In girls' or women's clothes all the time
- ○ Usually in girls' or women's clothes
- ○ Half the time in girls' or women's clothes and half the time in boys' or men's clothes
- ○ Usually in boys' or men's clothes
- ○ In boys' or men's clothes all the time
- ○ Doesn't dress up

13. He states the wish to be a girl or a woman

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

14. He states that he is a girl or a woman

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

15. He talks about *not* liking his sexual anatomy (private parts)

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

If you indicated every day, frequently, once in a while, or very rarely, please describe what he says

---

16. He talks about *liking* his sexual anatomy (private parts)

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

If you indicated every day, frequently, once in a while, or very rarely, please describe what he says

---

Female Version

Please answer the following behavioral statements as they currently characterize your child's behavior. For each question, select the response which most accurately describes your child.

1. Her favorite playmates are:

- ○ Always girls
- ○ Usually girls
- ○ Boys and girls equally
- ○ Usually boys
- ○ Always boys
- ○ Does not play with other children

2. She plays with girl-type toys, such as "Barbie"

   ○ As a favorite toy
   ○ Frequently
   ○ Once in a while
   ○ Very rarely
   ○ Never

3. She plays with boy-type dolls such as "G.I. Joe" or "Ken"

   ○ As a favorite toy
   ○ Frequently
   ○ Once in a while
   ○ Very rarely
   ○ Never

4. She experiments with cosmetics (make-up) and jewelry

   ○ As a favorite activity
   ○ Frequently
   ○ Once in a while
   ○ Very rarely
   ○ Never

5. She imitates *female* characters seen on TV or in the movies

   ○ As a favorite activity
   ○ Frequently
   ○ Once in a while
   ○ Very rarely
   ○ Never

6. She imitates *male* characters seen on TV or in the movies

   ○ As a favorite activity
   ○ Frequently
   ○ Once in a while
   ○ Very rarely
   ○ Never

7. She plays sports with boys (but not girls)

   ○ As a favorite activity
   ○ Frequently
   ○ Once in a while
   ○ Very rarely
   ○ Never

8. She plays sports with girls (but not boys)

   ○ As a favorite activity
   ○ Frequently
   ○ Once in a while
   ○ Very rarely
   ○ Never

9. In playing "mother/father," "house," or "school" games, she takes the role of

   ○ A girl or woman at all times
   ○ Usually a girl or woman
   ○ Half the time a girl or woman and half the time a boy or man
   ○ Usually a boy or man
   ○ A boy or man at all times
   ○ Does not play these games

10. She plays "girl-type" games (as compared to "boy-type" games)

- ○ As a favorite activity
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

11. She plays "boy-type" games (as compared to "girl-type" games)

- ○ As a favorite activity
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

12. In dress-up games, she likes to dress up

- ○ In girls' or women's clothes all the time
- ○ Usually in girls' or women's clothes
- ○ Half the time in girls' or women's clothes and half the time in boys' or men's clothes
- ○ Usually in boys' or men's clothes
- ○ In boys' or men's clothes all the time
- ○ Doesn't dress up

13. She states the wish to be a girl or a woman

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

14. She states that she is a girl or a woman

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

15. She talks about *not* liking her sexual anatomy (private parts)

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

If you indicated every day, frequently, once in a while, or very rarely, please describe what she says

_____

16. She talks about *liking* her sexual anatomy (private parts)

- ○ Every day
- ○ Frequently
- ○ Once in a while
- ○ Very rarely
- ○ Never

If you indicated every day, frequently, once in a while, or very rarely, please describe what she says

_____

_____

Recalled Childhood Gender Identity/Gender Role Questionnaire

Kenneth J. Zucker,[5] *University of Toronto*

The 23-item Recalled Childhood Gender Identity/Gender Role Questionnaire (RCGI; Zucker et al., 2006) measures adolescent or adult recollections of sex-typed behavior (gender role and gender identity) and parent-child relations (closeness to mother and father) during childhood.

Development

The sex-typed behavior items were initially generated based on a consideration of "normative" sex differences in behavior identified in the gender developmental literature (e.g., peer preferences, toy preferences, roles in fantasy play, dress-up play, felt masculinity-femininity, gender identity, etc.) and the phenomenology of children who are referred clinically for gender dysphoria (formerly Gender Identity Disorder). The targeted populations for which the measure was intended to be used included general population samples, clinic-referred samples of adolescents and adults with gender dysphoria, adolescents and adults with a disorder of sex development, and adolescents and adults with varying sexual orientations.

A total 1305 adolescents and adults (mean age = 33.2 years; range, 13–74) completed the RCGI. The sample was quite varied (e.g., university students, gay men and women, parents of children with gender dysphoria, women with congenital adrenal hyperplasia, etc.). Factor-analysis identified a two-factor solution: Factor 1 (Gender Identity/Gender Role) consisted of 18 items and Factor 2 (Parent–Child Relations) consisted of 3 items. Retained items all had factor loadings > .40. Factor 1 accounted for 37.4 percent of the total variance and Factor 2 accounted for 7.8 percent of the total variance.

Response Mode and Timing

The measure can be completed in approximately 10 minutes in paper-and-pencil format. For 22 items, the variously worded response options are on a 5-point scale (where a = 1 and e = 5) and one item is rated on a 4-point scale. About half the items contain a response option (f) that indicates that the item did not apply (e.g., "I did not play with other children" when asked about favorite playmates during childhood).

Scoring

For Factor 1 (Items 1–15 and 18–21), the items are scored such that a higher score indicates a "conventional" pattern of sex-typed behavior in childhood (absolute range, 1.00–5.00). For birth-assigned males, 12 items are reverse-coded; for birth-assigned females, 7 items are reversed-coded. For Factor 2 (Items 16–17, and the difference score of Items 22 and 23), a higher score indicates relatively more closeness to the same-sex parent than to the other-sex parent (absolute range, –.66 to 4.33). SPSS syntax for both Factor 1 and 2 and calculation of a mean score for each factor (which takes into account any case in which there are missing values) is available from the author.

Specific scoring information follows, and can also be found in Zucker et al. (2006):

1. Response options are on a 5-point scale (where A = 1 and E = 5) and one item is rated on a 4-point scale. About half the items contain a response option (f) that indicates that the item did not apply (e.g., "I did not play with other children" when asked about favorite playmates during childhood).
2. For the *male* version, the following items need to be reverse-coded for Factor 1: Items 1–4, 7–12, 14, and 19.
3. For the *female* version, the following items need to be reverse-coded for Factor 1: Items 5–6, 11–12, 14–15, and 19.
4. For the *male* version, for Factor 2, the recode is as follows. For Item 17, A = C (1 to 3); B = D (2 to 4); C = A (3 to 1); D = B (4 to 2). The Parent Difference score is calculated as Item 22 – Item 23.
5. For the *female* version for Factor 2, Item 16 is reverse-coded. For Item 17, the recode is as follows: A = C (1 to 3); B = A (2 to 1); C = D (3 to 4); D = B (4 to 2). Item 22 is reverse-coded. The Parent Difference score is calculated as Item 23 – Item 22.
6. For Factor 2, the mean score for Items 16–17 and the Parent Difference score is calculated.

Reliability

In Zucker et al. (2006), Factor 1 had a Cronbach's $\alpha = .92$ and Factor 2 had a Cronbach's $\alpha = .73$.

Validity

For Factor 1, 11 items were expected to elicit "normative" sex difference (e.g., sex of one's preferred playmates, interest in "masculine" vs. "feminine" toys). All 11 items

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yielded a significant sex difference in the expected direction, with Cohen's *d* ranging from 2.42 to 4.50. The remaining 6 items reflected the degree of conventionality of one's sex-typed behavior (e.g., how good one felt about being a boy or a girl) and thus were not intended to elicit sex differences per se. However, for four of the items, men recalled a stronger pattern of conventionality than women. Across all 6 items, Cohen's *d* ranged from .01 to .88. These data were obtained from an initial sample of 219 adults. For Factor 2, women reported a relatively closer relationship to their mothers than the men did to their fathers (Cohen's $d = .94$). Prior to the formal factor analysis on the entire sample, one additional item was added to the questionnaire.

For Factor 1, Zucker et al. (2006) reported on the discriminant validity in four samples: (1) men and women, unselected for gender identity or sexual orientation; (2) heterosexual vs. gay/lesbian adults; (3) women with congenital adrenal hyperplasia vs. unaffected sisters/female cousins; (4) adolescents with gender dysphoria vs. adolescent males with transvestic fetishism. Effect sizes using Cohen's *d* in these samples ranged from .40 to 2.67.

The RCGI has been used by a number of independent researchers (either using the complete questionnaire or selected items with the highest factor loadings). With regard to Factor 1, these studies have provided further evidence of discriminant validity (Reisner et al., 2014; Sumia, Lindberg, Työläjärvi, & Kaltiala-Heino, 2017), genetic and non-shared environmental effects (Alanko et al., 2010), relationship to risk factors associated with gender nonconformity (Alanko et al., 2009; Roberts, Rosario, Corliss, Koenen, & Austin, 2012), an association with traits of autism spectrum disorder (Shumer, Roberts, Reisner, Lyall, & Austin, 2015), current levels of depression and anxiety (Alanko et al., 2009), association with sexual orientation (Reisner et al., 2014; Singh, McMain, & Zucker, 2011) and preference for "anal sex role" (Swift-Gallant, Coome, Monks, & VanderLaan, 2017).

Summary

The RCGI has become a commonly used measure to assess patterns of recalled sex-typed behavior in childhood. It has been used in a variety of samples in the U.S., Canada, and in European and Scandinavian samples. It can be used in both general population samples and various clinical populations.

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Exhibit

Recalled Childhood Gender Identity/Gender Role Questionnaire

What is your gender assigned at birth?

○ Male
○ Female

Female Version

Please answer the following questions about your behaviour as a child, that is, the years "0 to 12." For each question, select the response that best describes your behavior as a child. Please note that there are no "right or wrong" answers.

1. As a child, my favourite playmates were

   - ○ A) always boys
   - ○ B) usually boys
   - ○ C) boys and girls equally
   - ○ D) usually girls
   - ○ E) always girls
   - ○ F) I did not play with other children

2. As a child, my best or closest friend was

   - ○ A) always a boy
   - ○ B) usually a boy
   - ○ C) a boy or a girl
   - ○ D) usually a girl
   - ○ E) always a girl
   - ○ F) I did not have a best or close friend

3. As a child, my favourite toys and games were

   - ○ A) always "masculine"
   - ○ B) usually "masculine"
   - ○ C) equally "masculine" and "feminine"
   - ○ D) usually "feminine"
   - ○ E) always "feminine"
   - ○ F) neither "masculine" or "feminine"

4. Compared to other girls, my activity level was

   - ○ A) very high
   - ○ B) higher than average
   - ○ C) average
   - ○ D) lower than average
   - ○ E) very low

5. As a child, I experimented with cosmetics (make-up) and jewelry

   - ○ A) as a favourite activity
   - ○ B) frequently
   - ○ C) once in a while
   - ○ D) very rarely
   - ○ E) never

6. As a child, the characters on TV or in the movies that I imitated or admired were

   - ○ A) always girls or women
   - ○ B) usually girls or women
   - ○ C) girls/women and boys/men equally
   - ○ D) usually boys or men
   - ○ E) always boys or men
   - ○ F) I did not imitate or admire characters on TV or in the movies

7. As a child, I enjoyed playing sports such as baseball, hockey, basketball, and soccer

   - ○ A) only with boys
   - ○ B) usually with boys
   - ○ C) with boys and girls equally
   - ○ D) usually with girls
   - ○ E) only with girls
   - ○ F) I did not play these types of sports

8. In fantasy or pretend play, I took the role

   - ○ A) only of boys and men
   - ○ B) usually of boys and men

- ○ C) boys/men and girls/women equally
- ○ D) usually of girls or women
- ○ E) only of girls and women
- ○ F) I did not do this type of pretend play

9. In dress-up play, I would

- ○ A) wear boys' or men's clothing all the time
- ○ B) usually wear boys' or men's clothing
- ○ C) half the time wear boys' or men's clothing and half the time wear girls' or women's clothing
- ○ D) usually wear girls' or women's clothing
- ○ E) wear girls' or women's clothing all the time
- ○ F) I did not do this type of play

10. As a child, I felt

- ○ A) very masculine
- ○ B) somewhat masculine
- ○ C) masculine and feminine equally
- ○ D) somewhat feminine
- ○ E) very feminine
- ○ F) I did not feel masculine or feminine

11. As a child, compared to other girls my age, I felt

- ○ A) much more masculine
- ○ B) somewhat more masculine
- ○ C) equally masculine
- ○ D) somewhat less masculine
- ○ E) much less masculine

12. As a child, compared to my sister, I felt (if you had more than one sister, make your comparison with the brother closest age to you)

- ○ A) much more masculine
- ○ B) somewhat more masculine
- ○ C) equally masculine
- ○ D) somewhat less masculine
- ○ E) much less masculine
- ○ F) I did not have a brother

13. As a child, I (if you had more than one brother, make your comparisons with the sister closest in age to you)

- ○ A) always resented or disliked my brother
- ○ B) usually resented or disliked my brother
- ○ C) sometimes resented or disliked my brother
- ○ D) rarely resented or disliked my brother
- ○ E) never resented or disliked my brother
- ○ F) I did not have a brother

14. As a child, my appearance (hair-style, clothing, etc.) was

- ○ A) very masculine
- ○ B) somewhat masculine
- ○ C) equally masculine and feminine
- ○ D) somewhat feminine
- ○ E) very feminine
- ○ F) neither masculine or feminine

15. As a child, I

- ○ A) always enjoyed wearing dresses and other "feminine" clothes
- ○ B) usually enjoyed wearing dresses and other "feminine" clothes
- ○ C) sometimes enjoyed wearing dresses and other "feminine" clothes

- ○ D) rarely enjoyed wearing dresses and other "feminine" clothes
- ○ E) never enjoyed wearing dresses and other "feminine" clothes

16. As a child, I was

- ○ A) emotionally closer to my mother than to my father
- ○ B) somewhat emotionally closer to my mother than to my father
- ○ C) equally close emotionally to my mother and to my father
- ○ D) somewhat emotionally closer to my father than to my mother
- ○ E) emotionally closer to my father than to my mother
- ○ F) not emotionally close to either my mother or to my father

17. As a child, I

- ○ A) admired my mother and my father equally
- ○ B) admired my father more than my mother
- ○ C) admired my mother more than my father
- ○ D) admired neither my mother nor my father

18. As a child, I had the reputation of a 'tomboy'

- ○ A) all of the time
- ○ B) most of the time
- ○ C) some of the time
- ○ D) on rare occasions
- ○ E) never

19. As a child, I

- ○ A) always felt good about being a girl
- ○ B) usually felt good about being a girl
- ○ C) sometimes felt good about being a girl
- ○ D) rarely felt good about being a girl
- ○ E) never felt good about being a girl
- ○ F) never really thought about how I felt being a girl

20. As a child, I had the desire to be a boy but did not tell anyone

- ○ A) almost always
- ○ B) frequently
- ○ C) sometimes
- ○ D) rarely
- ○ E) never

21. As a child, I would tell others I wanted to be a boy

- ○ A) almost always
- ○ B) frequently
- ○ C) sometimes
- ○ D) rarely
- ○ E) never

22. As a child, I

- ○ A) always felt that my mother cared about me
- ○ B) usually felt that my mother cared about me
- ○ C) sometimes felt that my mother cared about me
- ○ D) rarely felt that my mother cared about me
- ○ E) never felt that my mother cared about me
- ○ F) cannot answer because I did not live with my mother (or know her)

23. As a child, I

- ○ A) always felt that my father cared about me
- ○ B) usually felt that my father cared about me

- ○ C) sometimes felt that my father cared about me
- ○ D) rarely felt that my father cared about me
- ○ E) never felt that my father cared about me
- ○ F) cannot answer because I did not live with my father (or know him)

Male Version

Please answer the following questions about your behaviour as a child, that is, the years "0 to 12." For each question, select the response that best describes your behavior as a child. Please note that there are no "right or wrong" answers.

1. As a child, my favourite playmates were

   - ○ A) always boys
   - ○ B) usually boys
   - ○ C) boys and girls equally
   - ○ D) usually girls
   - ○ E) always girls
   - ○ F) I did not play with other children

2. As a child, my best or closest friend was

   - ○ A) always a boy
   - ○ B) usually a boy
   - ○ C) a boy or a girl
   - ○ D) usually a girl
   - ○ E) always a girl
   - ○ F) I did not have a best or close friend

3. As a child, my favourite toys and games were

   - ○ A) always "masculine"
   - ○ B) usually "masculine"
   - ○ C) equally "masculine" and "feminine"
   - ○ D) usually "feminine"
   - ○ E) always "feminine"
   - ○ F) neither "masculine" or "feminine"

4. Compared to other boys, my activity level was

   - ○ A) very high
   - ○ B) higher than average
   - ○ C) average
   - ○ D) lower than average
   - ○ E) very low

5. As a child, I experimented with cosmetics (make-up) and jewelry

   - ○ A) as a favourite activity
   - ○ B) frequently
   - ○ C) once in a while
   - ○ D) very rarely
   - ○ E) never

6. As a child, the characters on TV or in the movies that I imitated or admired were

   - ○ A) always girls or women
   - ○ B) usually girls or women
   - ○ C) girls/women and boys/men equally
   - ○ D) usually boys or men
   - ○ E) always boys or men
   - ○ F) I did not imitate or admire characters on TV or in the movies

7. As a child, I enjoyed playing sports such as baseball, hockey, basketball, and soccer

   ○ A) only with boys
   ○ B) usually with boys
   ○ C) with boys and girls equally
   ○ D) usually with girls
   ○ E) only with girls
   ○ F) I did not play these types of sports

8. In fantasy or pretend play, I took the role

   ○ A) only of boys and men
   ○ B) usually of boys and men
   ○ C) boys/men and girls/women equally
   ○ D) usually of girls or women
   ○ E) only of girls and women
   ○ F) I did not do this type of pretend play

9. In dress-up play, I would

   ○ A) wear boys' or men's clothing all the time
   ○ B) usually wear boys' or men's clothing
   ○ C) half the time wear boys' or men's clothing and half the time wear girls' or women's clothing
   ○ D) usually wear girls' or women's clothing
   ○ E) wear girls' or women's clothing all the time
   ○ F) I did not do this type of play

10. As a child, I felt

    ○ A) very masculine
    ○ B) somewhat masculine
    ○ C) masculine and feminine equally
    ○ D) somewhat feminine
    ○ E) very feminine
    ○ F) I did not feel masculine or feminine

11. As a child, compared to other boys my age, I felt

    ○ A) much more masculine
    ○ B) somewhat more masculine
    ○ C) equally masculine
    ○ D) somewhat less masculine
    ○ E) much less masculine

12. As a child, compared to my brother, I felt (if you had more than one brother, make your comparison with the brother closest age to you)

    ○ A) much more masculine
    ○ B) somewhat more masculine
    ○ C) equally masculine
    ○ D) somewhat less masculine
    ○ E) much less masculine
    ○ F) I did not have a brother

13. As a child, I (if you had more than one sister, make your comparisons with the sister closest in age to you)

    ○ A) always resented or disliked my sister
    ○ B) usually resented or disliked my sister
    ○ C) sometimes resented or disliked my sister
    ○ D) rarely resented or disliked my sister
    ○ E) never resented or disliked my sister
    ○ F) I did not have a sister

14. As a child, my appearance (hair-style, clothing, etc.) was

- ○ A) very masculine
- ○ B) somewhat masculine
- ○ C) equally masculine and feminine
- ○ D) somewhat feminine
- ○ E) very feminine
- ○ F) neither masculine or feminine

15. As a child, I

- ○ A) always enjoyed wearing dresses and other "feminine" clothes
- ○ B) usually enjoyed wearing dresses and other "feminine" clothes
- ○ C) sometimes enjoyed wearing dresses and other "feminine" clothes
- ○ D) rarely enjoyed wearing dresses and other "feminine" clothes
- ○ E) never enjoyed wearing dresses and other "feminine" clothes

16. As a child, I was

- ○ A) emotionally closer to my mother than to my father
- ○ B) somewhat emotionally closer to my mother than to my father
- ○ C) equally close emotionally to my mother and to my father
- ○ D) somewhat emotionally closer to my father than to my mother
- ○ E) emotionally closer to my father than to my mother
- ○ F) not emotionally close to either my mother or to my father

17. As a child, I

- ○ A) admired my mother and my father equally
- ○ B) admired my father more than my mother
- ○ C) admired my mother more than my father
- ○ D) admired neither my mother nor my father

18. As a child, I had the reputation of a 'sissy'

- ○ A) all of the time
- ○ B) most of the time
- ○ C) some of the time
- ○ D) on rare occasions
- ○ E) never

19. As a child, I

- ○ A) always felt good about being a boy
- ○ B) usually felt good about being a boy
- ○ C) sometimes felt good about being a boy
- ○ D) rarely felt good about being a boy
- ○ E) never felt good about being a boy
- ○ F) never really thought about how I felt being a boy

20. As a child, I had the desire to be a girl but did not tell anyone

- ○ A) almost always
- ○ B) frequently
- ○ C) sometimes
- ○ D) rarely
- ○ E) never

21. As a child, I would tell others I wanted to be a girl

- ○ A) almost always
- ○ B) frequently
- ○ C) sometimes

- ○ D) rarely
- ○ E) never

22. As a child, I

- ○ A) always felt that my mother cared about me
- ○ B) usually felt that my mother cared about me
- ○ C) sometimes felt that my mother cared about me
- ○ D) rarely felt that my mother cared about me
- ○ E) never felt that my mother cared about me
- ○ F) cannot answer because I did not live with my mother (or know her)

23. As a child, I

- ○ A) always felt that my father cared about me
- ○ B) usually felt that my father cared about me
- ○ C) sometimes felt that my father cared about me
- ○ D) rarely felt that my father cared about me
- ○ E) never felt that my father cared about me
- ○ F) cannot answer because I did not live with my father (or know him)

Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults

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The 27-item Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults (GIDYQ-AA) is a structured interviewer-led or self-report measure designed to measure gender identity (gender dysphoria) in adolescents and adults (Deogracias et al., 2007; Singh et al., 2010). It was conceptualized as a dimensional measure of gender dysphoria to be used with adolescents and adults who have variations from the "normative" male-female binary vis-à-vis gender identity. Target populations include clients with a DSM diagnosis of Gender Identity Disorder (now Gender Dysphoria), adolescents and adults who self-identify as "gender variant," and adolescents and adults with a disorder of sex development (DSD).

Development

The items were initially generated based on common expressions of gender dysphoria as seen clinically in adolescents and adults with gender dysphoria and in adolescents and adults with a DSD who might not meet the full DSM criteria for Gender Identity Disorder. An effort was made to capture a range of subjective (n =13), social (n = 9), somatic (n = 3), and sociolegal (n = 2) indicators of gender identity/gender dysphoria. The items were formulated by the Research Work Group of the North American Task Force on Intersexuality.

Deogracias et al. (2007) administered the GIDYQ-AA to 389 university students who self-labeled their gender identity as male or female (304 self-labeled as heterosexual; 67 self-labeled as gay or bisexual; 9 self-labeled as unlabeled or other: 237 female; 143 male; 9 other students self-identified as transgender or "other") and 73 adolescents or adults referred clinically for gender identity concerns (22 females; 51 males). The mean age of the university-based participants was 19.94 years (range, 18–52). The mean age of the clinic-referred participants

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was 29.38 years (range, 13–61). Factor analysis indicated that a one-factor solution best fit the data (eigenvalue = 16.54). All 27 items had factor loadings > .30 (median .82; range .34 to .96), accounting for 61.3 percent of the total variance (Cronbach's α = .97).

Response Mode and Timing

The measure can be administered in a face-to-face interview, but extensive experience with this measure indicates that a self-report format is more efficient. For each item, the response options are on a 1–5 point scale, with the verbal anchor points ranging from *Always* to *Never*, for the past 12 months. For adolescents < 18 years of age, the words woman and man should be changed to girl and boy, respectively.

Scoring

The 27 items are summed and then divided by 27, such that a lower score indicates more gender dysphoria. Items 1, 13, and 27 are reverse-scored. If an item is left blank, SPSS syntax allows the mean to be calculated accordingly (available from the corresponding author). Each item has a comment section for the participant, who can elaborate on their answer. Items 1–2, 5–10, 16, and 24–27 were considered to be subjective indicators of gender identity/gender dysphoria. Items 3–4, 11, 13–15, and 17–19 were considered social indicators. Items 20–22 were considered somatic indicators; and Items 12 and 23 were considered sociolegal indicators.

Validity

In Deogracias et al. (2007), there was evidence for discriminant validity in that the gender identity clients reported significantly more gender dysphoria than the university-based sample. Cohen's *d* for the male gender identity clients was 13.47 and 16.68 for the female gender identity clients (with the reference group as the university-based heterosexual men and heterosexual women, respectively). Based on visual inspection, the distribution in scores suggested a cut-off score of <3.00 for "caseness." For the gender identity clients, sensitivity was 90.4 percent and, for the controls, specificity was 99.7 percent. Singh et al. (2010) provided further validity evidence for the GIDYQ-AA. In two studies, adolescents and adults referred clinically for gender dysphoria were compared to adolescents and adults referred clinically for other issues (total N = 277). Discriminant validity was demonstrated as in Deogracias et al. (2007), with effect sizes ranging from 4.74–21.18. In the adolescent sample, sensitivity was 91 percent and specificity was 100 percent; in the adult sample, sensitivity was 90 percent and specificity was 100 percent.

Further evidence for validity of the GIDYQ-AA has been established in several studies. Schneider et al. (2016) showed a significant correlation between the GIDYQ-AA and another measure of gender dysphoria in a sample of European adults referred clinically for gender dysphoria. Fisher et al. (2017) confirmed the discriminant validity of the scale when comparing Italian adolescents with gender dysphoria and a non-referred comparison group. Singh et al. (2010) showed that degree of gender dysphoria on the GIDYQ-AA was significantly correlated with a measure of recalled gender-variant behavior in childhood (Zucker et al., 2006) and Singh, McMain, and Zucker (2011) found that degree of gender dysphoria on the GIDYQ-AA was higher among clinic-referred women with a diagnosis of borderline personality disorder who self-reported with a bisexual or lesbian sexual orientation. Several other studies have documented the usefulness of the GIDYQ-AA among patients with a DSD (e.g., Fisher et al., 2015, 2017; Mattila, Fagerholm, Santtila, Miettinen, & Taskinen, 2012; Taskinen, Suominen, & Mattila, 2016).

Summary

The GIDYQ-AA is a relatively brief and transparent measure that can assess an adolescent or adult's gender identity/gender dysphoria in both clinical and non-clinical populations. It has been used with a variety of populations in North America, Europe, and Asia and has excellent clinical utility in providing a quantitative metric for caseness that can be used in conjunction with the DSM diagnosis of gender dysphoria.

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Exhibit

Gender Identity/Gender Dysphoria Questionnaire: Adult Version (Females)

Instructions: Women may vary a lot in how they think and feel about themselves in terms of gender, ranging from feeling totally comfortable in being a woman to uncertainty through pursuing a change into a man. Thus, we are not talking about reactions to some social disadvantage of women in our society, but about the basic sense of self of being a woman. You will read some questions about how you have been thinking and feeling in this regard about yourself *during the past 12 months*. Please answer each question with one of five answers: Always, Often, Sometimes, Rarely, or Never. In the Comments section after each question, please feel free to write out anything you wish to add.

1. In the past 12 months, have you felt satisfied being a woman?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

2. In the past 12 months, have you felt uncertain about your gender, that is, feeling somewhere in between a woman and a man?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

3. In the past 12 months, have you felt pressured by others to be a woman, although you don't really feel like one?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

4. In the past 12 months, have you felt, unlike most women, that you have to work at being a woman?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

5. In the past 12 months, have you felt that you were not a real woman?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

6. In the past 12 months, have you felt, given who you really are (e.g., what you like to do, how you act with other people), that it would be better for you to live as a man rather than as a woman?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

7. In the past 12 months, have you had dreams?

   Yes ___ No ___

If *no*, skip to Question 8

If *yes*, have *you* been in your dreams?

   Yes ___ No ___

If *no*, skip to Question 8.

If *yes*, in the past 12 months, have you had dreams in which you were a man?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

8. In the past 12 months, have you felt unhappy about being a woman?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

9. In the past 12 months, have you felt uncertain about yourself, at times feeling more like a man and at times feeling more like a woman?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

10. In the past 12 months, have you felt more like a man than like a woman?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

11. In the past 12 months, have you felt that you did not have anything in common with either men or women?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

12. In the past 12 months, have you been bothered by seeing yourself identified as female or having to check the box "F" for female on official forms (e.g., employment applications, driver's license, passport)?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

13. In the past 12 months, have you felt comfortable when using women's restrooms in public places?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

14. In the past 12 months, have strangers treated you as a man?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

15. In the past 12 months, at home, have people you know, such as friends or relatives, treated you as a man?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

16. In the past 12 months, have you had the wish or desire to be a man?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

17. In the past 12 months, at home, have you dressed and acted as a man?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

18. In the past 12 months, at parties or at other social gatherings, have you presented yourself as a man?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

19. In the past 12 months, at work or at school, have you presented yourself as a man?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

20. In the past 12 months, have you disliked your body because it is female (e.g., having breasts or having a vagina)?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

21. In the past 12 months, have you wished to have hormone treatment to change your body into a man's?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

22. In the past 12 months, have you wished to have an operation to change your body into a man's (e.g., to have your breasts removed or to have a penis made)?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

23. In the past 12 months, have you made an effort to change your legal sex (e.g., on a driver's license or credit card)?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

24. In the past 12 months, have you thought of yourself as a "hermaphrodite" or an "intersex" rather than as a man or woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

25. In the past 12 months, have you thought of yourself as a "transgendered person"?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

26. In the past 12 months, have you thought of yourself as a man?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

27. In the past 12 months, have you thought of yourself as a woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

Gender Identity/Gender Dysphoria Questionnaire: Adult Version (Males)

Instructions: Men may vary a lot in how they think and feel about themselves in terms of gender, ranging from feeling totally comfortable in being a man to uncertainty through pursuing a change into a woman. You will read some questions about how you have been thinking and feeling in this regard about yourself *during the past 12 months*. Please answer each question with one of five answers: Always, Often, Sometimes, Rarely, or Never. In the Comments section after each question, please feel free to write out anything you want to add.

1. In the past 12 months, have you felt satisfied being a man?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

2. In the past 12 months, have you felt uncertain about your gender, that is, feeling somewhere in between a man and a woman?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

3. In the past 12 months, have you felt pressured by others to be a man, although you don't really feel like one?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

4. In the past 12 months, have you felt, unlike most men, that you have to work at being a man?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

5. In the past 12 months, have you felt that you were not a real man?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

6. In the past 12 months, have you felt, given who you really are (e.g., what you like to do, how you act with other people), that it would be better for you to live as a woman rather than as a man?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

7. In the past 12 months, have you had dreams?

   Yes ___ No ___

If *no*, skip to Question 8

If *yes*, have *you* been in your dreams?

   Yes ___ No ___

If *no*, skip to Question 8.

If *yes*, in the past 12 months, have you had dreams in which you were a woman?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

8. In the past 12 months, have you felt unhappy about being a man?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

9. In the past 12 months, have you felt uncertain about yourself, at times feeling more like a woman and at times feeling more like a man?

   Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

10. In the past 12 months, have you felt more like a woman than like a man?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

11. In the past 12 months, have you felt that you did not have anything in common with either women or men?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

12. In the past 12 months, have you been bothered by seeing yourself identified as male or having to check the box "M" for male on official forms (e.g., employment applications, driver's license, passport)?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

13. In the past 12 months, have you felt comfortable when using men's restrooms in public places?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

14. In the past 12 months, have strangers treated you as a woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

15. In the past 12 months, at home, have people you know, such as friends or relatives, treated you as a woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

16. In the past 12 months, have you had the wish or desire to be a woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

17. In the past 12 months, at home, have you dressed and acted as a woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

18. In the past 12 months, at parties or at other social gatherings, have you presented yourself as a woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

19. In the past 12 months, at work or at school, have you presented yourself as a woman?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

20. In the past 12 months, have you disliked your body because it is male (e.g., having a penis or having hair on your chest, arms, and legs)?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

21. In the past 12 months, have you wished to have hormone treatment to change your body into a woman's?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

22. In the past 12 months, have you wished to have an operation to change your body into a woman's (e.g., to have your penis removed or to have a vagina made)?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

23. In the past 12 months, have you made an effort to change your legal sex (e.g., on a driver's license or credit card)?

    Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

24. In the past 12 months, have you thought of yourself as a "hermaphrodite" or an "intersex" rather than as a man or woman?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

25. In the past 12 months, have you thought of yourself as a "transgendered person"?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

26. In the past 12 months, have you thought of yourself as a woman?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

27. In the past 12 months, have you thought of yourself as a man?

Always ___ Often ___ Sometimes ___ Rarely ___ Never ___ [12 months]

Comments:

15 Gender Identity

New Multidimensional Sex/Gender Measure

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The Multidimensional Sex/Gender Measure (MSGM; Bauer, Braimoh, Scheim & Dharma, 2017) is a flexible multi-item measure to capture dimensions of sex and gender. These can be used separately or coded into a single trans-inclusive sex/gender measure. The three core items capture sex assigned at birth (generally genital phenotype), gender identity, and lived gender, with the lived gender item completed only by the subset of participants who do not check male–male or female–female for the first two items. These three core items allow for the analysis of data by birth-assigned sex, gender identity, or lived gender, and for cross-classification into single variables that identify trans and non-binary participants by either identity or lived gender. These dimensions may be centrally important to different research questions, with cross-classification by identity producing the largest groups of trans or non-binary persons, and classification by lived gender being relevant to studying processes wherein one may be interacting with other individuals or with systems (e.g., health services) while presenting in their gender. Depending on study goals, investigators may wish to add optional items such as a write-in personal gender identity item, and items on hormonal medications and surgeries. These latter items allow for assessment of endogenous and exogenous hormones, and for current sexual anatomy and physiology, in situations where those dimensions may be relevant.

Development

The MSGM was designed as a self-report measure for English-language population surveys of individuals age 14 and over, including those of diverse gender, age, cultural, and linguistic backgrounds. It was derived as a best option based on an evaluation of two existing measures from Canada (Bauer, 2012) and the United States (Gender Identity in U.S. Surveillance Group, 2014), followed by consultations with experts.

Formative research began with a mixed-methods evaluation of existing measures based on 311 survey respondents and a maximum diversity sub-sample of 79 respondents who completed cognitive interviews (Bauer et al., 2017). While there was high agreement between these two measures on a cross-classified trans-inclusive gender variable, problems were identified with both. This study identified the following considerations as critical for a trans-inclusive population study of sex and gender: (1) participant willingness to complete the items (low missingness); (2) high comprehension, including among the cisgender majority and those for whom English is not a first language; (3) no assumption that trans people will indicate a trans identity; (4) careful attention to which dimension(s) of sex and/or gender are captured; (5) not merging intersex with trans issues or assuming intersex persons are assigned such at birth; (6) having an explicit option for those with Indigenous or other cultural gender minority identities; (7) allowing space for genderqueer, non-binary or agender persons to identify, and; (8) avoiding difficulties inherent in recoding or comprehending individuals' diverse personal gender identities.

Based on these considerations, pragmatic considerations (e.g., the need for language that is clear when read out loud), and results of the evaluation, the research team adapted or drafted survey items to form a new measure. Consultations were then held with 12 people with specific expertise in population survey design and/or gender identity, including Indigenous gender identities. Item wording and response options were modified

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based on their expert knowledge. Wording was kept as simple as possible, both for comprehension and to avoid dependence on terms that are likely to change rapidly over time (these are limited to examples within response options).

Response Mode and Timing

The MSGM is designed for participant self-completion, or for interviewer administration, but not for proxy reporting, as some dimensions may not be known to others. Completion times were not measured, as participants completed the measure as part of a larger survey. Information from the cognitive interviews suggests the measure was generally quick to complete for participants.

Scoring

Each individual dimension of sex or gender may be used on its own as a unidimensional measure. Coding for multidimensional measures first requires that the lived gender item is forward filled for those cisgender participants for whom there was a skip pattern. For example, those assigned male at birth who identify as male are forward filled to indicate they live as male in their day-to-day lives.

Coding of the three core items can produce four different variables as trans-inclusive sex/gender measures. Choice of coding will depend on the research question (e.g., the importance of gender identity versus lived gender) and on adequate sample size. The two options for sex assigned at birth can be cross-classified with the four gender identity groups to produce an eight-category variable with separate groups for cisgender women, cisgender men, trans women, trans men, Indigenous or cultural gender minorities (assigned female), Indigenous or cultural gender minorities (assigned male), non-binary persons (assigned female), and non-binary persons (assigned male). These categories can be collapsed into four categories representing cisgender women, cisgender men, trans or non-binary (assigned female), and trans or non-binary (assigned male).

Sex assigned at birth can similarly be cross-classified with lived gender to produce eight groups that are living as male, female, sometimes one and sometimes the other, or something else, separately based on sex assigned at birth, and can be similarly combined to produce four collapsed categories.

SAS code for scoring the three core items into these four options for single trans-inclusive sex/gender items based on either identity or lived gender is available online as a supplemental file to the original publication ("S3 File: SAS Coding for New Multidimensional Sex/Gender Measure"; Bauer et al., 2017). This file also includes coding for the trans sub-group within a sample, to identify those who are or are not living their day-to-day lives in their identified gender.

Reliability

General measures of internal reliability do not apply to categorical sociodemographic measures. Test–retest reliability was not assessed, though high agreement (Cohen's kappa = .9081, $N = 310$) between the two test measures used in developing the MSGM (one at survey, and one at follow-up within one to three weeks) suggests that self-reported assigned sex and gender identity dimensions are stable (Bauer et al., 2017).

Validity

As this measure is not a scale, validation methods for psychometric measures do not apply. Validation of self-report for sex or gender variables against a gold standard has not been conducted (e.g., comparing self-reported sex assigned at birth with original birth records).

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Exhibit

Multidimensional Sex/Gender Measure

1. What sex were you assigned at birth, meaning on your original birth certificate?

   ○ Male
   ○ Female

2. Which best describes your current gender identity?

   ○ Male
   ○ Female
   ○ Indigenous or other cultural gender minority identity (e.g. two-spirit)
   ○ Something else (e.g. gender fluid, non-binary)

The third question may be asked only of those who indicated a current gender identity different than their birth-assigned sex. If so, it can be forward-filled to code cisgender participants as living in their identified (and birth-assigned) sex/gender.

3. What gender do you currently live as in your day-to-day life?

   ○ Male
   ○ Female
   ○ Sometimes male, sometimes female
   ○ Something other than male or female

An Inclusive Gender Identity Measure

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The traditional gender question (a binary choice between man/male and woman/female) is inconsistent with modern multidimensional theories of gender (e.g., Diamond, Pardo, & Butterworth, 2011), excludes people with non-binary gender identities (who do not identify exclusively as men or women; e.g., Joel, Tarrasch, Berman, Mukamel, & Ziv, 2014; Kuper, Nussbaum, & Mustanski, 2012), and cannot distinguish cisgender people from gender minorities (transgender, non-binary, and gender nonconforming people; e.g., Institute of Medicine, 2011). Without best practice recommendations, organizations and researchers may continue to overlook gender minorities by using the traditional binary gender measure or attempt inclusion using exclusive ternary (male, female, or transgender) gender items which have been shown to induce threat in transgender participants (Broussard, Warner, & Pope, 2018).

This single-item gender identity measure improves accuracy and reduces unintended exclusion by including non-binary and agender identities, provides a free-text response option, and reduces missing data by including *choose not to answer* and *don't know* options. This item can be used in any research for which gender is an important factor, in order to properly and usefully classify participants. If combined with a second question about transgender identity (e.g., Grant, Mottet, Tanis, Harrison, Herman, & Keisling, 2011) or sex assigned at birth (e.g., Tate, Ledbetter, & Youssef, 2013), these items can also more effectively identify transgender people.

Development

This measure was is intended for behavioral research with general populations, and was tested with samples of both self-identified gender minorities and psychology undergraduate students. We refined the question to identify wordings that produce low levels of identity threat, can be understood by participants with differing levels of knowledge about gender, and are valid predictors of outcomes like group identification and pronoun usage (Haupert & Smith, 2017).

Despite widespread use, just adding an *other* option to the binary question is not sufficient. Our measure explicitly includes non-binary and agender identities (the most

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common identities after "woman" and "man") to signal to participants that researchers are aware of and care about such identities and to streamline data analysis. We added the *another identity not listed* option (with free text response) to accommodate the diversity of terminology present in contemporary gender minority communities and provide feedback about changing labels over time without literally "othering" those who select that option. The *don't know* option accommodates participants who are currently questioning their identities, and the *choose not to answer* option reduces missing data while preserving participants' privacy (Haupert & Smith, 2017).

Importantly, we also omitted outdated and objectionable language (e.g., "male-to-female") and question wording that implies that transgender people's genders are less "real" than those of cisgender people (e.g., separate options for "Female" and "Transgender Female"; Tate et al., 2013).

Response Mode and Timing

This measure was tested in online surveys, and takes under one minute to complete. Participants may check/circle or type/write-in identification on either paper or electronic versions.

Scoring

This measure is categorical and needs no scoring. However, free text responses (typically < 1%) must be hand-coded. If the secondary transgender identity or sex assigned at birth question is also used, the two can be analyzed as separate variables or compared to identify transgender participants (i.e., those who indicate a transgender identity or whose gender identity differs from their sex assigned at birth). Depending on theoretical rationale, response options may be collapsed for analysis.

Reliability

Long-term test–retest reliability is theoretically inappropriate for this measure, as gender identity (and especially the terms used to describe it) may change over time (Diamond et al., 2011). Across two studies (total $N = 1{,}071$), 99 percent of participants responded identically to our question asked twice within the same survey (Haupert & Smith, 2017).

Validity

We define gender identity as the relationship a person perceives between the self and the gender groups commonly recognized within their culture. A person's gender identity is not necessarily the same as external observers' perceptions of their gender group membership (Tate et al., 2013); rather, like other social identities, it is quintessentially based in self-categorization, a subjective sense of membership or lack of membership in a given gender group (Turner, 1982). Our measure is only designed to predict outcomes related to *identity*, rather than sexed bodies or gender roles.

To provide evidence of criterion validity, we used our measure to predict responses to the Multi-Gender Identity Questionnaire (Joel et al., 2014) among gender minorities ($n = 83$) and undergraduates ($n = 507$), and found significantly different patterns of responding for the different gender categories. For example, both men and women (both transgender and cisgender) were significantly more likely to feel like their gender and to use pronouns of their gender. Both non-binary and agender people were significantly less likely to feel like men or like women, more likely to feel like neither a man nor a woman, and more likely to use gender-neutral pronouns.

The consequential validity of gender measures must also be considered. Non-inclusive gender measures (e.g., the traditional binary question) and poorly constructed gender items (e.g., male/female/transgender) reduce identification of transgender persons with their self-identified gender group (Broussard, Warner, & Pope, 2018) and induce identity threat for gender minority participants (Haupert & Smith, 2017). In contrast, after responding to an inclusive measure, gender minorities ($N = 291$) reported higher expectations of respect and belonging in the research context, were more willing to disclose information, and perceived the researchers as more concerned and knowledgeable about transgender people (Haupert & Smith, 2017).

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Exhibit

Inclusive Gender Identity Measure

1. What is your gender identity?

   - ○ Man
   - ○ Woman
   - ○ Non-binary (e.g. genderqueer, genderfluid)
   - ○ Agender
   - ○ Another identity not listed _____
   - ○ Do not know
   - ○ Choose not to answer

2. "Transgender" describes people whose gender identity or expression is different, at least part of the time, from the sex assigned to them at birth. Do you consider yourself to be transgender?

   - ○ Yes
   - ○ No
   - ○ Do not know
   - ○ Choose not to answer

3. What was your sex assigned at birth?

   - ○ Female
   - ○ Male
   - ○ Female, but I am intersex
   - ○ Male, but I am intersex
   - ○ Do not know
   - ○ Choose not to answer

Genderqueer Identity Scale

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The Genderqueer Identity Scale (GQI; McGuire, Beck, Catalpa, & Steensma, 2018) is a self-administered measure using Likert response options and is composed of an 18-item, 3-factor construct and a 5-item unidimensional subscale. The GQI is designed to assess identification and expression of genderqueer and non-binary gender characteristics. This scale measures four dimensions of genderqueer identity: *Challenging the Binary, Social Construction of Gender, Theoretical Awareness of Gender*, and *Gender Fluidity*. *Challenging the Binary* is a 5-item subscale assessing gender identity and expression. The *Social Construction* subscale contains 7 items that measure how participants understand their gender as emanating from within (a more essentialist perspective; low scores) versus being socially constructed (high scores). One item is considered optional as it tends to load poorly in samples of persons seeking medical transition, although it loads well in other genderqueer samples. *Theoretical Awareness* contains 6 items that examine varying degrees of social and political

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intention attached to gender identity. Finally, a 5-item unidimensional subscale of *Gender Fluidity* measures participants' proclivity to change and vary their gender expression over time.

The GQI is capable of measuring non-binary gender identities longitudinally, across various ages, and, if applicable, across aspects of social and/or medical gender transitions. The GQI is applicable in both community and clinical settings, with people of all gender identities and gender expressions. Based on pilot testing with adolescents and adults and preliminary analyses with adults, we expect the GQI can be quite useful in clinical or community settings for those seeking support for their gender identity and expression. Research examining the psychometric properties of the GQI in younger adolescents is forthcoming.

Development

The original items were generated based on extensive interviews with transgender and genderqueer persons, and with clinical and community-based researchers and psychologists with experience in the psychometrics of instrument development and with clinical work and research in gender identity. The GQI was created to mitigate concerns with previous gender identity related measurement predicated on binary assumptions about sex and gender identity development and expression. Rather than reinforce a binary conceptualization of gender, the GQI draws from academic and clinical literature exposing gender variability within the transgender population (Diamond, Pardo, & Butterworth, 2011; Doan, 2016; Herman, Grant, & Harrison, 2012) and reinforces the importance of considering developmental differences in gender identity and expression across various ages, and, if applicable, across changes due to aspects of social and/or medical gender transition (Berg et al., 2016).

Employing exploratory and confirmatory factor analyses, researchers improved the GQI factor structure and item functioning. Two items were reconsidered and one was dropped while the other was made optional due to differing factor loadings across samples. Additionally, the 5 items that now make up the *Gender Fluidity* subscale were originally developed only for those people who sought services for the purposes of medical transition and thus began with the words, "Once I transition . . ." After initial pilot research, to address greater inclusivity for persons not seeking services, the prompt was changed to "In the future . . ." Thus, the *Gender Fluidity* subscale is ultimately viewed as one scale of the GQI, but has currently been factored separately due to its unique development process.

Response Mode and Timing

The GQI is self-administered and takes no more than 10 minutes to complete. The following items should be reverse scored: Items 6, 7, 18, 20, and 21.

Scoring

The majority of items are worded such that higher scores correspond with genderqueer, nonbinary, and genderfluid identities and lower scores correspond with cisgender and transgender binary identities. While future research is needed to determine clinical cut points, a mean can be obtained from each subscale with higher scores reflecting higher endorsement of the underlying constructs. *Challenging the Binary* includes Items 1–5, *Social Construction of Gender* includes Items 6–11, *Theoretical Awareness of Gender* includes Items 12–17, and *Gender Fluidity* includes Items 18–23. Two items on the *Social Construction* scale (6 and 7) and 3 items on the *Gender Fluidity* subscale (18, 20, and 21) are reverse scored. The item "I talk a lot with others about gender" from the *Social Construction* scale is optional because of inconsistent factor loadings in the scale development process.

Reliability

Initially, exploratory factor analyses were employed to evaluate the scale across three different samples (total $N = 767$; 2 community samples and 1 clinical sample), all of which included a diverse group of people who identify on an LGBTQ (lesbian, gay, bisexual, transgender, queer) spectrum.

Based on the exploratory findings from these samples some of the items were slightly modified. The revised version was then piloted again with a fourth community sample of 110 LGBTQ people, recruited via an online survey forum. This sample ranged in age between 18–30 years with 46.7 percent assigned male at birth, 32.7 percent assigned female at birth, and 17.3 percent choosing not to report an assigned sex. As expected, overall results consistently yielded a 3-factor structure. The "in the future" items were factored separately as they were initially only given to clinic participants, and only later expanded to all participants. *Gender Fluidity* emerged as a unique component of genderqueer identity that is distinct from the other three subscales.

Reliability for the GQI was tested across the four separate samples for each individual subscale. Based on exploratory factor analyses, the average Cronbach's alpha was .80 for *Challenging the Binary*, .76 for *Social Construction of Gender*, .81 for *Theoretical Awareness of Gender*, and .64 for *Gender Fluidity*. Further testing,

based on confirmatory factor analyses (CFA) enhanced the scale reliability for the *Gender Fluidity* subscale to .88 (McGuire et al., 2018).

Validity

Construct validity was first assessed with a single-group confirmatory factor analysis in which three factors were found to load significantly on their intended factor with loadings of >.40 and adequate reliability. Individual CFA models showed good fit and showed that all the path coefficients were significant across samples. Similar outcomes were found for multigroup CFA analyses with clinical and community groups, with invariance between those groups on the three factor solutions (*Challenging the Binary, Social Construction*, and *Theoretical Awareness*). The fourth scale of fluidity functioned quite differently across the gender groups (McGuire et al., 2018).

The GQI shows good face validity (i.e., good translation of the concept of genderqueer identity) and shows good content validity (i.e., good empirical measurement and operationalization of various domains of genderqueer and genderfluid identity). Mean level differences across transgender binary, genderqueer/non-binary and cisgender sexual minority persons begin to establish predictive validity and convergence of this important construct (Catalpa, McGuire, Berg, Fish, Rider, & Bradford, 2019). Cisgender sexual minority persons reported lower levels on all four subscales than either transgender or genderqueer participants, whereas only the two interpersonal scales (*Challenging the Binary* and *Gender Fluidity*) were different across the transgender and genderqueer subsamples. (Catalpa et al., 2019). Further, the subscales are moderately correlated.

Finally, the subscales function to uniquely predict enacted stigma for different groups (Fish, Catalpa, & McGuire, 2017). For genderqueer participants, higher levels of gender fluidity was related to less social support and lower reported physical health, but not so for transgender binary participants. Conversely, genderqueer participants who reported relatively higher rates of *Theoretical Awareness* and *Challenging the Binary* were more likely to also report social support and psychological health than their transgender counterparts (Fish et al., 2017).

The GQI subscales show discriminant validity from each other and other indicators of gender identity in that they are not overly correlated among themselves (Catalpa et al., 2019), or with other indicators of gender such as gender dysphoria or body image. In validation studies, *Social Construction* and *Theoretical Awareness*, both of which tap into non-binary thinking, were correlated at a low level (r = .14), and *Challenging the Binary* and *Gender Fluidity*, measures of non-binary acting, were more highly correlated (r = .46). The subscales appear to be tapping distinct elements of gender identity not heretofore captured in other measures of clinical gender assessment. The Utrecht Gender Dysphoria Scale was not correlated with *Challenging the Binary* or *Social Construction* (r = –.001, and r = –.077, *ns*, respectively), but was positively correlated with *Theoretical Awareness* (r = .369, p <.00) and negatively correlated with *Gender Fluidity* (r = –.345, p <.00).

Other Information

Gender Fluidity items were originally drafted with a skip pattern for people seeking medical transition. Ultimately the items were modified and tested on a broader sample, but needed to be factored separately because of the wording changes. Future iterations could factor *Fluidity* with the other sub-scales, or independently as needed.

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Exhibit

Genderqueer Identity Scale

Subscale 1. Challenging the Binary

The statements below are about your gender identity and expression. Please indicate to what degree you agree with each statement.

	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
1. I am non-binary, genderqueer, or an identity other than male or female.	○	○	○	○	○
2. I don't want to be seen in the gender binary (as either male or female).	○	○	○	○	○
3. I try to deliberately confuse people about whether I am male or female.	○	○	○	○	○
4. I try to do things that are masculine and feminine at the same time.	○	○	○	○	○
5. I enjoy it when people are not sure if I am male or female.	○	○	○	○	○

Subscale 2. Social Construction

The statements below are about how you understand your gender. Please indicate to what degree you agree with each statement.

	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
6. The way I think about my gender has always been the same.	○	○	○	○	○
7. My gender comes naturally from within me.	○	○	○	○	○
8. My gender is something I have spent a lot of time figuring out.	○	○	○	○	○
9. The way I show my gender changes depending on who I am with.	○	○	○	○	○
10. The way I think about my gender has been influenced by experiences in my life.	○	○	○	○	○
11. The way I think about my gender will probably continue to change further as I age.	○	○	○	○	○
*. I talk a lot with others about gender.	○	○	○	○	○

*Item loads poorly in the EFA clinical sample, and inconsistently in the CFA non-clinical sample. Optional to include if needed for other purposes.

Subscale 3. Theoretical Awareness

The statements below are about your political and theoretical awareness of gender. Please indicate to what degree you agree with each statement.

	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly agree
12. I have done research about gender theory and gender roles.	○	○	○	○	○
13. I try to convince others that society should not insist on a gender binary.	○	○	○	○	○
14. I try to convince others that society expects people to be too gender conforming.	○	○	○	○	○
15. Around me, I make sure people are free to express whatever gender roles they want.	○	○	○	○	○
16. The way I show my gender is important because I push society to question traditional gender roles.	○	○	○	○	○
17. I encourage others to be more open minded about gender and gender roles.	○	○	○	○	○

Subscale 4. Gender Fluidity

The statements below are about how fluid you think your gender will be in the future. Please indicate to what degree you agree with each statement.

		0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
18.	In the future, my gender expression will be traditional.	○	○	○	○	○
19.	In the future, it will upset me if people misgender me.	○	○	○	○	○
20.	The way I show my gender will probably be mostly the same from day to day.	○	○	○	○	○
21.	In the future, I expect that people will rarely question my gender.	○	○	○	○	○
22.	In the future, I think my gender will be fluid or change over time.	○	○	○	○	○
23.	I will have a non-traditional gender role (be gender non-conforming).	○	○	○	○	○

Utrecht Gender Dysphoria Scale—Gender Spectrum

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The Utrecht Gender Dysphoria Scale—Gender Spectrum (UGDS-GS; McGuire, Berg, Catalpa, Spencer, & Steensma, 2017) is a revised measure of the original Utrecht Gender Dysphoria Scale (UGDS). The UGDS is a long-standing, validated, 12-item measure of gender dysphoria for both adults and adolescents which uses two separate versions for those assigned male versus those assigned female at birth (Cohen-Kettenis & van Goozen, 1997; Steensma et al., 2013). The revised measure, adapted to a single version inclusive across the gender spectrum, captures dissatisfaction with gender identity and expression over time as well as comfort with affirmed gender identity. Dysphoria can fluctuate over time, regardless of birth assigned sex or process of medical intervention to change gender identity or expression.

The original UGDS versions for those assigned male at birth and those assigned female at birth were factored and normed separately, and thus had few items in common. Further, the versions attended to differing elements of dysphoria, with differing instrumental versus affective triggers (Cohen-Kettenis & van Goozen, 1997). For example, the assigned male version contained more emotional, feminine language, with 11 items expressing dysphoria with a male gender role, and one item expressing desire for a female role, and none requiring reverse scoring. In contrast, the assigned female version used more pragmatic, masculine language, with four items expressing dysphoria with a female role, four items expressing desire for a male role, and four items expressing positive feelings about a female role that required reverse coding. Perhaps most problematically, there was no true way to assess continuing dysphoria after a gender role change and the questions for the new gender role would be inappropriate for longitudinal analyses due to item differences. Finally non-binary or genderqueer persons may not be able to reliably respond to either version of the prior instrument. The aim of adapting this measure was to address these measurement and applicability limitations by creating a gender-neutral measure that may be used with a person of any gender identity and expression (e.g., transfeminine spectrum, transmasculine spectrum, genderqueer,

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nonbinary, cisgender, etc.) and that retains its measure structure when administered longitudinally.

The UGDS-GS is an 18-item self-report, Likert-type scale measure revised to be (a) inclusive of all gender identities and expressions; (b) appropriate for use longitudinally from adolescence to adulthood; and (c) administered at any point in the social or medical transition process, if applicable, or in community based research focused on gender dysphoria examining cisgender and transgender persons. Exploratory analyses of the factor structures were conducted with two online samples, one predominately LGB, and another trans-identified sample. A rotated factor matrix was used to determine item-factor loadings (criteria: item values ≥ .40 on the primary factor and ≤ .30 on the other factors). Following significant and reliable findings, researchers performed a confirmatory factor analysis. Results indicated acceptable fit with two subscales: *Gender Dysphoria* (hereafter *Dysphoria*) and *Gender Affirmation* (CFI = .97, RMSEA = .063, SRMR = .02, chi-square = 209.90, $df = 134$, $p = .001$).

Development

Clinicians and researchers collaborated to revise the UGDS and piloted the revision with a sample of transgender, genderqueer, and nonbinary participants (TGQNB; $N = 141$) and a sample of lesbian, gay, bisexual, and queer (LGBQ; $N = 123$) participants recruited via Amazon Mechanical Turk. The items were also pilot tested with a sample of adolescent transgender and genderqueer clinic group participants. The collaboration team chose "*assigned sex*" to indicate sex assigned at birth and "*affirmed gender*" to indicate a person's current gender identity. In the revised survey instructions, participants are provided with the definition of assigned sex and affirmed gender to prevent confusion about these terms.

Researchers combined both versions, increasing the item number from 12 items per version (a total of 24 items) to 20 items total. Changes to item wording were made to reflect more modern cultural norms, and use of gendered language. For example "my life is meaningless" was shifted to "I feel hopeless," and the verb misgender was included on one item, as well as gender-neutral language for puberty and body changes. Psychometric analyses indicated that two items ("Living as my assigned sex feels positive for me" and "I enjoy seeing my naked body in the mirror") did not meet item-factor loading criteria cutoffs, and were dropped, resulting in an 18-item scale.

In addition to psychometric analyses, researchers conducted an evaluation of participants' perceptions and experiences of taking the survey. Participants responded to questions about the language, inclusivity, and instructions of the survey using a Likert-type scale ranging from 1 (*disagree completely*) to 5 (*agree completely*). The mean for all evaluation questions was nearly 4, indicating that participants generally agreed that the instructions and questions used simple, clear language and were free of gender bias, worded appropriately, and gender inclusive. In written statements, cisgender participants reported uncertainty about questions referencing "affirmed gender." TGQNB participants offered comments to thank the researchers for asking the survey questions, although some disclosed that the questions touched on sensitive or sad topics, but participated because they felt it was for a good cause.

Response Mode and Timing

The UGDS-GS is self-administered and takes no more than 10 minutes to complete. Respondents are instructed to select the response that best describes how much they agree with each statement, ranging from 1 (*disagree completely*) to 5 (*agree completely*).

Scoring

Items on the *Dysphoria* subscale are worded such that higher scores correspond with greater gender dysphoria (e.g., "I hate the sex I was assigned at birth"). One has the word affirmed: "I wish I had been born as my affirmed gender." The four items that factored on the *Gender Affirmation* subscale are worded such that connection with affirmed gender is scored higher: "It feels good to live as my affirmed gender." Scores should be averaged for each subscale: *Dysphoria* (Items 2, and 6–18) and *Gender Affirmation* (Items 1, 3, 4, and 5), with no reverse scoring, to achieve a value between 1 and 5 each for *Dysphoria* and for *Gender Affirmation*.

Reliability

Principal component, exploratory, and confirmatory factor analyses were performed on the UGDS-GS with transgender and genderqueer samples, as well as sexual minority and heterosexual cisgender samples. The overall factor structure confirms two subscales, *Dysphoria* and *Gender Affirmation* that function across samples but in somewhat different ways. Cronbach's alphas were .90 and .91 for the LGBQ and TGQNB samples, respectively. EFA findings indicated a 2-factor structure with possible measurement error on the word *affirmed*. Even though researchers defined the terms in the instructions, there seems to be inconsistency on the word affirmed for persons not seeking medical or surgical transition services (i.e., LGBQ and GQNB persons).

Confirmatory factor analysis, with a two-factor structure specified, revealed good fit and factor loadings for the TGQNB sample (CFI = .97, RMSEA = .063, SRMR = .062) and marginal fit for the LGBQ sample (CFI = .96, RMSEA = .089, SRMR = .11). Additionally, the path model showed no areas of strain and good construct validity with items loading significantly on their intended factor

(loadings of ≥ .45 and ≥ .56, for the LGBQ and TGQNB samples, respectively). For LGBQ persons, the *Dysphoria* and *Gender Affirmation* subscales are not correlated ($r = -.08$). However, for TGQNB individuals, the *Dysphoria* and *Gender Affirmation* subscales are highly correlated ($r = .51$). This distinction clarifies that the scales (particularly *Gender Affirmation*) while valid in both groups, do measure distinct concepts across the groups.

Validity

The original measures had some prior studies of convergent and divergent validity to guide the current study. Steensma et al. (2013) compared sensitivity and specificity of the original UGDS on clinically referred and non-clinically referred adolescents and found near perfect discriminant validity for the measure. Similarly, Schneider et al. (2016) found that the UGDS scores were overall higher than the GIDYQ-AA, suggesting higher role dysphoria than current identity struggle (discriminant validity), and that both scales distinguished more dysphoria among assigned females than assigned males, providing some convergent validity as well.

The UGDS-GS subscales reveal convergent and discriminant validity in pilot analyses with LGBTQ samples. The *Dysphoria* subscale was not correlated with two genderqueer identity (GQI) subscales: Challenging the Binary and Social Construction ($r = -.001$, n.s., and $r = -.077$, n.s, respectively), but was correlated with two other subscales: Theoretical Awareness (.369, $p < .01$) and Gender Fluidity ($r = -.345$, $p < .01$). It stands to reason that persons who experience gender as more fluid would feel less distress with gender dysphoria. For both LGB persons and transgender persons, body satisfaction was significantly negatively correlated with gender dysphoria in preliminary analyses ($r = -.246$, $p < .01$). However, the correlation between *Gender Affirmation* and body image was significant only in the LGB subsample ($r = -.24$, $p < .01$, and $r = -.08$, *ns*, respectively), suggesting an important place for further exploration of discriminant validity. There exists a proven congruence between affirming medical intervention and body satisfaction among transgender persons. The lack of correlation between these scales for transgender persons alone suggests that crucial mediators like medical intervention or social acceptance of gender expression may influence the sensitivity or specificity of this measure.

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Exhibit

Utrecht Gender Dysphoria Scale—Gender Spectrum

For each question, select the response that best describes how much you agree with each statement. Note: Assigned sex means the sex you were assigned at birth and affirmed gender is the gender you currently identify with.

	1 Disagree completely	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Agree completely
1. I prefer to behave like my affirmed gender.	○	○	○	○	○
2. Every time someone treats me like my assigned sex I feel hurt.	○	○	○	○	○
3. It feels good to live as my affirmed gender.	○	○	○	○	○
4. I always want to be treated like my affirmed gender.	○	○	○	○	○
5. A life in my affirmed gender is more attractive for me than a life in my assigned sex.	○	○	○	○	○
6. I feel unhappy when I have to behave like my assigned sex.	○	○	○	○	○
7. It is uncomfortable to be sexual in my assigned sex.	○	○	○	○	○

8.	Puberty felt like a betrayal.	○	○	○	○	○
9.	Physical sexual development was stressful.	○	○	○	○	○
10.	I wish I had been born as my affirmed gender.	○	○	○	○	○
11.	The bodily functions of my assigned sex are distressing for me (i.e. erection, menstruation).	○	○	○	○	○
12.	My life would be meaningless if I would have to live as my assigned sex.	○	○	○	○	○
13.	I feel hopeless if I have to stay in my assigned sex.	○	○	○	○	○
14.	I feel unhappy when someone misgenders me.	○	○	○	○	○
15.	I feel unhappy because I have the physical characteristics of my assigned sex.	○	○	○	○	○
16.	I hate my birth assigned sex.	○	○	○	○	○
17.	I feel uncomfortable behaving like my assigned sex.	○	○	○	○	○
18.	It would be better not to live, than to live as my assigned sex.	○	○	○	○	○

16 Gender Roles, Norms, and Expressions

Femininities Scale

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Although recent advances in understanding gender have acknowledged multiple dimensions of masculinity (Thompson, Pleck, & Ferra, 1992), femininity is commonly construed as a unitary concept (e.g., Lehavot & Simoni, 2011). Existing unilateral measures have led to false assumptions about the association between femininity and psychological adjustment (Blair & Hoskin, 2016), and neglected key conceptual differences between self-actualized versus assigned/essentialized femininity (Blair & Hoskin, 2015). The Femininities Scale was developed based on Femme Theory's description of multiple femininities (Hoskin, 2017). It allows for a more accurate assessment of the varied ways respondents might enact their own femininity or construe the concept of femininity.

Development

The scale was based on Hoskin's (2017) Femme Theory, which describes feminine multiplicities such as Patriarchal, Hegemonic, Essentialized, and Femme. The first and second author generated items loosely intended to exemplify this typology. Items were also derived from a previous study on Femme identities (Blair & Hoskin, 2015, 2016) by thematically analyzing open-ended responses to questions regarding expressions of femininity.

The scale was administered to respondents in an online study examining religiosity, femininity and body image. Participants were recruited through online advertisements and social media. The scale can be completed by individuals of any gender identity; however, those who do not view themselves as feminine may have difficulty responding to some items in a meaningful fashion. Of the 391 individuals in the full study, the scale was originally administered to the 327 individuals who scored above 1 on a 7-point self-report item ranging from 0 (*not at all feminine*) to 6 (*very feminine*). However, respondents were given the option of choosing "N/A" if they did not see a scale item as applying to them, and preliminary analyses indicated high rates of missing data for participants who scored 2 or 3 on the femininity item. Therefore, further work was restricted to individuals scoring above the midpoint on the femininity self-report item (i.e., *somewhat, moderately*, or *very* feminine), and we currently recommend restricting scale interpretation to such individuals.

The 213 respondents who met this criterion were mostly women (n = 195, including trans women); followed by men (n = 9, including trans men); and the rest identifying as gender non-conforming or genderqueer (n = 9). Respondents were relatively young (M_{age} = 27.2, range 18–72), primarily White (82%), and primarily North American (48% American, 41% Canadian, 11% Other). Sexual identities included 70 percent straight, 12 percent queer, 12 percent bisexual, 3 percent lesbian, and 2 percent gay.

In an exploratory principal components analysis with Varimax rotation, the scree plot suggested 7 factors. Two of the initial 24 items were deleted due to low factor loadings (< .35) and are not included in the scale shown. The remaining 22 items had good factor loadings (> .45), with no substantial cross-loadings. The seven factors collectively accounted for 61 percent of the variability in the data. An exploratory analysis with an oblique rotation

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revealed no substantial correlations among the factors, all *r*s < .19, suggesting relatively independent factors. The factors are:

- *Instrumental Femininity* (Items 5, 6, 13, 14): Higher scores indicate an understanding of femininity as a tool, having value and utility.
- *Excluded* (Items 8, 9, 10, 11): Higher scores indicate feeling excluded on the basis of one's femininity, or perceived lack of femininity.
- *Flexible Femininity* (Items 15, 16): Higher scores indicate greater acceptance of diverse expressions of femininity.
- *Paradoxical Femininity* (Items 4, 7): Higher scores indicate viewing positive attributes as existing despite one's femininity.
- *For Others* (Items 17, 18, 19, 20): Higher scores indicate that femininity is perceived as a performance or an obligation, participated in for the benefit/pleasure of others.
- *Essentialized* (Items 1, 2, 3): Higher scores indicate conflation of being born a female and being feminine (i.e., biological determinism).
- *Feminine Aesthetic* (Items 12(R), 21, 22): Higher scores indicate a greater emphasis on physical appearance and traditional feminine beauty norms.

Note this represents a promising initial version of this scale; however, a revised version is anticipated in the future, to add additional items to the smaller subscales, further improve reliability, and more fully capture the Femme perspective outlined by Hoskin (2017).

Response Mode and Timing

The Femininities measure can be completed online or using paper-and-pencil. Participants indicate their level of agreement with the items on a 5-point scale ranging from *strongly disagree* to *strongly agree*. Participants may also select *not applicable* for each item. The items were presented in the order shown below but can also be presented in a randomized order. Given that each subscale is relatively independent, administering one or more subscales alone, rather than the full measure, would likely prove acceptable.

Scoring

The answer option *not applicable* should be coded as missing data. Item 12 is reverse scored. Average scores are calculated for each subscale (see item numbers for each subscale above), with higher scores indicating greater endorsement of the underlying construct. No total score is given for the entire measure; instead, the focus is placed on how the different construals of femininity may relate to other variables of interest.

Reliability

Three of the seven subscales showed acceptable to good internal consistency using Cronbach's alpha: Paradoxical Femininity (α = .80), For Others (α = .74), and Flexible Femininity (α = .71). Two other subscales showed relatively low internal consistency; however, these scales are showing substantial associations with other variables in a wide variety of analyses and seem to be assessing meaningful constructs even in their current preliminary form: Excluded (α = .64) and Essentialized (α = .54). The final two subscales showed low reliability and are not relating consistently to other variables: Instrumental Femininity (α = .52) and Feminine Aesthetic (α = .22). These subscales require further development before they are recommended for general use.

Validity

The scale showed concurrent validity by distinguishing between individuals with feminist and non-feminist identities. As expected, those who self-identified as feminists scored significantly higher on the Flexible Femininity subscale, and lower on the Essentialized and For Other scales, than those who did not. Feminists also reported a greater likelihood of feeling Excluded based on their expression of femininity.

The scale also demonstrated concurrent validity by predicting sexist beliefs, as measured by the Beliefs About Women scale (Snell & Godwin, 2013). As anticipated, scoring higher on the Essentialized, For Others, Paradoxical, and Feminine Aesthetic subscales was associated with endorsing more sexist beliefs, while higher scores on Flexible Femininity were associated with endorsing less sexist beliefs.

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Exhibit

Femininities Scale

Please indicate the extent to which you agree with the following statements using the following scale:

	1 Strongly Disagree	2 Slightly Disagree	3 Neither Agree nor Disagree	4 Slightly Agree	5 Strongly Agree	Not Applicable
1. I was born female, therefore I am feminine.	○	○	○	○	○	○
2. I have always been feminine.	○	○	○	○	○	○
3. I have never put much thought into my femininity.	○	○	○	○	○	○
4. Despite my femininity, I am strong.	○	○	○	○	○	○
5. My femininity makes me strong.	○	○	○	○	○	○
6. Without my femininity, I would be worthless.	○	○	○	○	○	○
7. Despite my femininity, I am intelligent.	○	○	○	○	○	○
8. Sometimes I feel other women do not think I act femininely enough.	○	○	○	○	○	○
9. I am excluded from opportunities because of my femininity.	○	○	○	○	○	○
10. I am excluded from social events because I am not feminine enough.	○	○	○	○	○	○
11. I feel out of place among a group of feminine women.	○	○	○	○	○	○
12. When it comes to makeup, less is more.	○	○	○	○	○	○
13. Others value me for my femininity.	○	○	○	○	○	○
14. I know how to use femininity to get what I want and need.	○	○	○	○	○	○
15. Femininity can be expressed in many different ways.	○	○	○	○	○	○
16. Each person's femininity is as unique as they are.	○	○	○	○	○	○
17. It is important to me to behave and appear femininely in order to attract male partners or please/attract my partner.	○	○	○	○	○	○
18. Sometimes I wear dresses to please my partner, even though I do not like wearing dresses.	○	○	○	○	○	○
19. Sometimes I wear makeup to please my partner, even though I do not like makeup.	○	○	○	○	○	○
20. I make a conscious effort to wear outfits I know my partner likes.	○	○	○	○	○	○
21. I worry about lifting weights at the gym, because I don't want to look like a man.	○	○	○	○	○	○
22. Makeup is part of my daily routine.	○	○	○	○	○	○

Sex is Power Scale

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We developed the Sex is Power Scale (SIPS) to operationalize the idea that many women view sexuality as a source of power, particularly power over men (Erchull & Liss, 2013); however, whether a sense of power derived from women's sexuality is a source of authentic or false empowerment is debated (Lamb, 2010; Lamb & Peterson, 2012; Peterson, 2010).

The SIPS is a 12-item, 2-factor measure. The first seven items comprise the first factor, the Self-Sex is Power Scale (S-SIPS), used to assess participants' attitudes about sexuality

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being a source of power for themselves. Items 8–12 comprise the second factor, the Women-Sex is Power Scale (W-SIPS), used to assess participants' attitudes about the extent to which women in general use sex as a source of power.

Development

The SIPS was developed with young women, mostly college undergraduates, who primarily identified as heterosexual. This measure was an offshoot from the development of the Enjoyment of Sexualization Scale (ESS; Liss, Erchull, & Ramsey, 2011). In the initial investigation of the items that would comprise the ESS, three items (Items 1, 5, and 9 of the SIPS) comprised a potential second factor assessing the idea that women can get power through their sexuality; however, the subscale did not have enough items to allow for the development of a reliable scale. An additional 10 items were developed for the SIPS by the scale authors to allow for more reliable measurement of this construct.

In the first study included in the original publication on the SIPS (Erchull & Liss, 2013), an exploratory factor analysis was run on the 13 items using principal axis factoring with oblimin rotation (N = 232). Three factors had eigenvalues over 1. The first factor represented a coherent set of items about women's personal sense of gaining power through their sexuality. The second and third factors were conceptually indistinguishable, so a two-factor solution was forced which resulted in a coherent second factor assessing beliefs that women generally use beauty and sexuality as a source of power. No items cross-loaded between factors above .20, and the 12 items retained in the SIPS all loaded on their respective factors (seven on S-SIPS and five on W-SIPS) above .5.

In the second study included in the original investigation of the SIPS (Erchull & Liss, 2013), confirmatory factor analysis was used to confirm the two-factor structure of the measure (N = 217). The model had good fit to the data, and all items loaded above .6 on their respective factors.

Response Mode and Timing

Agreement with items is assessed using a 6-point scale 1 (*disagree strongly*) to 6 (*agree strongly*). A 6-point response scale was used so that participants could not choose a neutral midpoint. Participants should be able to complete the SIPS in under five minutes.

Scoring

The S-SIPS and W-SIPS scores are calculated by separately averaging the scores on the seven S-SIPS items (1–7) and five W-SIPS items (8–12). There are no reverse-scored items.

Reliability

Cronbach's alpha on both subscales of the SIPS has been consistently high across samples. In the three studies included in the original publication about the SIPS (Erchull & Liss, 2013), alphas for the S-SIPS were .87 and .89 with sample of undergraduate women and .91 in a sample of young women recruited through social media. The alphas for the W-SIPS were .82 and .79 in the undergraduate samples and .83 for the social media sample. The test–retest reliability of the SIPS has not yet been assessed, and it is unknown how stable the underlying constructs are across time and situations.

Validity

In the third study included in the original SIPS publication (Erchull & Liss, 2013), the validity of the SIPS was explored using a sample of undergraduate women (N = 131). As would be expected given the common root of their development, both the S-SIPS and the W-SIPS were positively correlated with the ESS (Liss et al., 2011). The W-SIPS was moderately correlated with the ESS. As both the S-SIPS and the ESS assess participants' attitudes about themselves, a strong correlation was found, but the constructs still appeared to be distinct. This provides evidence of both convergent and discriminant validity. As the ESS was found to be moderately positively correlated with both hostile and benevolent sexism (Liss et al., 2011), we expected similar relationships between the subscales of the Ambivalent Sexism Inventory (Glick & Fiske, 1996) and the two SIPS subscales. Both the S-SIPS and the W-SIPS were moderately positively correlated with benevolent sexism, indicating that women who view sexuality as a source of power for themselves and other women were likely to endorse the idea that women should be cherished and rewarded when they conform to traditional aspects of femininity. Only the W-SIPS, however, was significantly correlated with hostile sexism. The W-SIPS contains some items assessing beliefs about women seeking to control men, so this small-to-moderate relationship is evidence of convergent validity.

The S-SIPS was also positively correlated with the body surveillance subscale of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) and the body evaluation subscale of the Interpersonal Sexual Objectification Scale (ISOS; Kozee, Tylka, Augustus-Horvath, & Denchik, 2007) demonstrating convergent validity. It makes sense conceptually that those women who see their sexuality as a source of personal power would spend more time evaluating their bodies and would be more likely to experience having their bodies evaluated by others. The moderate effect sizes, however, provide evidence of discriminant validity. The S-SIPS was not significantly correlated with either the body shame subscale of the OBCS or the unwanted sexual advances subscale of the ISOS, providing further evidence of discriminant validity.

As the W-SIPS assesses participants' attitudes about women in general rather than themselves, the lack of significant correlations to the OBCS surveillance and shame subscales provides evidence of discriminant validity. Surprisingly, the W-SIPS did exhibit small-to-moderate positive correlations with both ISOS subscales indicating that women who had experienced more objectification were more likely to view sex as a source of power for women in general.

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Exhibit

Sex Is Power Scale

Please indicate the extent to which you agree with the following statements.

	1 Disagree Strongly	2	3	4	5	6 Agree Strongly
1. I use my body to get what I want.	○	○	○	○	○	○
2. I can get what I want using my feminine wiles.	○	○	○	○	○	○
3. My sex appeal helps me control men.	○	○	○	○	○	○
4. If a man is attracted to me, I can usually get him to do what I want him to do.	○	○	○	○	○	○
5. I like to use my womanhood to my advantage.	○	○	○	○	○	○
6. My sexuality gives me power.	○	○	○	○	○	○
7. I lead men on sometimes, but it makes me feel good.	○	○	○	○	○	○
8. A beautiful woman can usually get what she wants.	○	○	○	○	○	○
9. Beauty gives women power.	○	○	○	○	○	○
10. Men are easily manipulated by beautiful women.	○	○	○	○	○	○
11. Women can use their looks to control men.	○	○	○	○	○	○
12. Women can control men through sex.	○	○	○	○	○	○

Women's Nontraditional Sexuality Questionnaire

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First reported in 2012, the Women's Nontraditional Sexuality Questionnaire (WNSQ) was created to investigate women's sexual behaviors and attitudes as broadly as possible by including forms of sexuality that are prohibited by traditional norms, such as recreational sex, self-pleasuring, and using sex as a means to gain an end (Levant et al., 2012). The WNSQ is based on the Gender Role Strain Paradigm (Pleck, 1981, 1995) which posits that girls

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internalize dominant expectations for traditional femininity and experience psychological stress, strain, and conflict as they navigate a binary gendered world. Feminine norms regarding sexuality require women to only have sex within the context of a relationship and suggest that the purpose of sex is, in addition to procreation, to enhance the couple's attachment (Hynie, Lydon, Cote, & Wiener, 1998; Levant, Rankin, Hall, Smalley, & Williams, 2012; Levant, Richmond, Cook, House, & Aupont, 2007). Thus, women are discouraged from engaging in recreational sex, self-pleasuring, and using sex as a means to an end (Alexander & Fisher, 2003). Extant measures have examined women's sexuality narrowly. For example, the Sociosexual Orientation Index (SOI; Simpson & Gangestad, 1991) is a unidimensional scale focused only on casual sex. Other attempts to measure recreational sex have viewed it as a competition or a game between men and women (Ward & Rivadeneyra, 1999). Sexual norms for women are changing, with many women feeling empowered to explore nontraditional sexuality. The WNSQ seeks to measure these unmeasured aspects of women's sexuality that have not been tapped by previous measures.

Development

The WNSQ is a 23-item self-report measure designed to measure both sexual attitudes and behaviors. It was developed in two studies which sought to assess changes and variations in women's sexual attitudes and behaviors (Levant et al., 2012). Data were obtained from female students (Study 1, $N = 243$; Study 2, $N = 627$) recruited from psychology classes at a large Midwestern university. Originally, the WNSQ was envisioned as one attitudinal scale and five behavioral subscales. However, in the first study, three items had no variance or very low variance and were dropped. Two of these items were derived from an *Involvement in Commercial Sex* subscale (e.g., by paying for, or receiving payment for, a sexual experience), which led to this subscale also being dropped. Further, exploratory factor analysis (EFA) indicated that the attitudinal items loaded together with the behavioral items, resulting in the subscale *Nontraditional Attitudes* being dropped. This resulted in a four-factor instead of a six-factor structure, which was supported through confirmatory factor analysis (CFA) in the second study. Thus, the final WNSQ consists of four subscales: *Involvement in Casual Sex* ("How often do you have sex outside of an exclusive relationship?"); *Self-Pleasuring* ("How often do you masturbate?"); *Degree of Sexual Interest* ("Given the chance, how often would you choose to have sex?"); and *Using Sex as a Means to an End* ("How often do you have sex to end a fight?"). The four factors accounted for 33.5 percent of the variance.

After two preliminary questions about the respondent's sexual experience and activity, Items 3–20 assess the frequency of sexual behaviors that occur for reasons other than procreation or expression of love within a committed sexual relationship, and Items 21–23 ask respondents to report the strength of their agreement or disagreement with statements regarding non-traditional sex.

Response Mode and Timing

After two preliminary *yes–no* questions, the questionnaire offers two different response formats. Most of the questionnaire asks about the frequency of various sexual behaviors, measuring responses on a 7-point Likert-type scale from 1 (*never*) to 7 (*frequently*). The last three items measure attitudes about nontraditional sexuality on a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The questionnaire is usually completed within 15 to 20 minutes.

Scoring

The mean or sum of items on a subscale is calculated based on the following: *Involvement in Casual Sex*: Items 5, 6, 9, 12, 13, 17, 18; *Self-pleasuring*: Items 7, 8, 10, 14, 20; *Degree of Sexual Interest*: Item 3, 11, 16, 21; and *Using Sex as a Means to an End*: Items 4, 15, 19, 22, 23. Item 23 is reverse scored.

Reliability

Reliability for the total scale was demonstrated with a Cronbach's alpha of .84. Subscale alphas were .82, .80, .67, and .75 for the subscales *Involvement in Casual Sex, Self-pleasuring, Degree of Sexual Interest*, and *Using Sex as a Means to an End*, respectively.

Validity

Convergent evidence for construct validity for the WNSQ is reported in Levant et al. (2012); analyses conducted with data from Study 1 and Study 2 combined. Convergent evidence for construct validity for the WNSQ was supported by its large correlation ($r = .67$, $p < .01$) with the SOI (Simpson & Gangestad, 1991), which measures individual's willingness to engage in sex with a partner who is not committed to them. As expected, the *Casual Sex* subscale had the highest correlation with the SOI ($r = .73$, $p < .01$), whereas the other subscales had moderate correlations (rs ranging from .32 to .51, $ps < .01$). This is consistent with the intention that the WNSQ, as a multi–dimensional instrument, was constructed to measure casual sex *plus* other nontraditional sexual behaviors such as self-pleasuring, using sex as a means to an end, and degree of sexual interest. In addition, convergent evidence for construct validity was supported by a moderate negative correlation ($r = –.42$, $p < .01$) between the total scale score of the WNSQ and the Purity subscale of the Femininity Ideology Scale (FIS; Levant et al., 2007), which measures the degree to which women endorse traditional feminine sexual norms. The *Sex as a Means to an End* subscale had the smallest correlation with the Purity subscale of the FIS ($r = –.20$, $p < .01$), whereas the other subscales had small to moderate correlations (ranging from $r = –.24$ to $–.41$,

p's < .01). In study 2, concurrent evidence of validity of the WNSQ was assessed by examining its relationship with the Health Protective Sexual Communication Scale (HPSCS; Catania, 1998; Levant et al., 2012). HPSCS had a significant, positive, but weak correlation with the WNSQ total score ($r = .08$, $p < .05$), but the *Involvement in Casual Sex* subscale had a larger correlation with the HPSCS ($r = .19$, $p < .01$).

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Exhibit

Women's Nontraditional Sexuality Questionnaire

Thank you for your help with our study! We are looking at current sexual practices and attitudes in our society. We are very interested in your honest responses to our questions. First you will be asked a few questions about yourself, and then you will complete the survey. We would like this survey to remain anonymous, so please do not put your name on the survey. Again, we appreciate your help.

For all of the following questions, please consider the term "sex" to refer to any form of intimate physical contact involving more than kissing between you and another person (of any sex).

1. Have you ever had sex based on the above definition?

   ○ Yes
   ○ No

2. Are you currently sexually active (based on the above definition)?

   ○ Yes
   ○ No

	1 Never	2	3	4	5	6	7 Frequently
3. Given the chance, how often would you choose to have sex?	○	○	○	○	○	○	○
4. How often have you had sex to end a fight?	○	○	○	○	○	○	○
5. How often do you go somewhere (e.g., bar, social event) to find someone to have sex with?	○	○	○	○	○	○	○
6. How often would you have anonymous sex with someone you are very attracted to if you are/were single?	○	○	○	○	○	○	○
7. How often do you masturbate?	○	○	○	○	○	○	○
8. How often do you use sex toys alone?	○	○	○	○	○	○	○
9. How often do you cheat sexually on a partner?	○	○	○	○	○	○	○
10. How often do you purchase sex toys?	○	○	○	○	○	○	○
11. How often do you say what you want or need during sex?	○	○	○	○	○	○	○
12. How often do you have sex outside of an exclusive relationship?	○	○	○	○	○	○	○

13. How often would you have anonymous sex with someone you were very attracted to if you were in a relationship and knew for sure that your partner would not find out?	○	○	○	○	○	○	○
14. How often do you buy an X-rated video?	○	○	○	○	○	○	○
15. How often do you use sex to get something you want?	○	○	○	○	○	○	○
16. How often do you fantasize about having sex with your current partner?	○	○	○	○	○	○	○
17. Do you ever have sex with a friend with whom you are not interested in dating (so-called "friends with benefits")?	○	○	○	○	○	○	○
18. How often do you have sex with someone you just met?	○	○	○	○	○	○	○
19. How often have you had sex to get someone to do something for you?	○	○	○	○	○	○	○
20. How often do you watch pornography alone?	○	○	○	○	○	○	○

For the following questions, please indicate to what extent you agree or disagree with the following statements. Keep in mind that the definition of sex is any form of intimate physical contact involving more than kissing between you and another person (opposite or same sex).

	1 Strongly Disagree	2	3	4	5 Strongly Agree
21. One should always be ready for sex.	○	○	○	○	○
22. Sex can be a useful tool in some situations.	○	○	○	○	○
23. I would not use sex to get something I wanted.	○	○	○	○	○

Femininity Ideology Scale Short Form

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Developed in 1997, the Femininity Ideology Scale (FIS) was created to measure traditional femininity ideology, a central construct in the Gender Role Strain Paradigm (GRSP). The GRSP posits that gender roles are adopted during childhood socialization under the influence of gender ideologies, continue into adulthood, and result in numerous psychological strains (Lehman, 2000; Pleck, 1981, 1995). According to the GRSP, girls internalize dominant expectations for traditional femininity and experience psychological stress, strain, and conflict as they navigate a binary gendered world (Levant, Alto, McKelvey, Richmond, & McDermott, 2017). Conformity to traditional feminine norms is often met with positive consequences, whereas negative consequences are associated with a failure to conform. Research has identified that endorsement of traditional femininity ideology varies according to other social identities (e.g., race, class, geographic location), and has found a connection between the endorsement of traditional femininity ideology (TFI) and poor mental health outcomes for girls and women (Lehman, 2000; Richmond, Levant, Smalley, & Cook, 2015; Tolman & Porche, 2000).

The Femininity Ideology Scale Short Form (FIS-SF) has been developed recently to measure TFI as efficiently as the original FIS but with a shorter completion time in order to be less taxing for participants. The FIS-SF can be used for clinical and research purposes.

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Development

The initial FIS consisted of 166 statements about traditional femininity with a focus on common themes such as body image, care-taking, sexuality, religion, marriage, passivity, dependency, and career. The responses from 292 male and female participants were analyzed using principle components analysis (PCA) to reduce the number of items (Lehman, 2000). The resulting scale consisted of 45 items which loaded on five factors: Stereotypic Image and Activities (the belief that women should uphold a certain physical image and participate in traditional activities), Dependency/Deference (the idea that women should have a subordinate role to their male counterparts), Purity (values should be placed on a woman's chastity and a passive sexual role), Caretaking (the idea that maternal contributions should be a woman's ultimate fulfillment), and Emotionality (the belief that women should be emotionally sensitive, open, and loyal to traditional roles; Lehman, 2000). The original five-factor dimensionality was supported in a later PCA (Levant, Richmond, Cook, House, & Aupont, 2007). However, a confirmatory factor analysis found an 18-item scale with four factors (not retaining the Dependency/Deference factor; Richmond et al., 2015).

The FIS-SF was developed in a study aimed at addressing the inconsistent findings regarding dimensionality (Levant et al., 2017). Data (N = 1,472; 907 women, 565 men; 530 people of color) were from community and college participants who responded to an online survey. Exploratory factor and bifactor analyses were conducted to develop the FIS-SF, which consists of 12 items measuring a general TFI factor and three specific factors: *Emotionality/Traditional Roles* ("It is expected that women will not think logically"), *Purity* ("A woman should not swear"), and *Dependence/Deference* ("A woman's success should be measured by the success of her partner"). A series of confirmatory factor analytic models confirmed the three-factor dimensionality and the bifactor structure. The latter was found to be the best fitting structure when compared to common factors and unidimensional models. Model-based reliability estimates tentatively support the use of raw scores to represent the general TFI factor and the *Emotionality/Traditional Roles* specific factor, but the other two specific factors are best measured using SEM or by ipsatizing their scores. Evidence was found for configural invariance across two gender groups (men and women) for the general and specific factors, and for partial metric invariance for the specific factors (for more detailed information, see Levant et al., 2017).

Response Mode and Timing

The FIS-SF can be completed in both paper and digital formats. Participants respond to statements about traditional norms for feminine behavior. Participants respond on a 5-point Likert-type scale, from 1 (*strongly disagree*) to 5 (*strongly agree*). The time required to complete the FIS-SF is around five to seven minutes.

Scoring

No items are reverse scored. Subscale and total scores are calculated by taking the mean of their respective items. *Dependence/Deference* items are: 1, 2, 3, and 4. *Purity* items are: 5, 6, 7, and 8. *Emotionality and Traditional Roles* items are: 9, 10, 11, and 12. The total score is calculated with Items 1 to 12.

Reliability

The original FIS demonstrated high reliability with a Cronbach's alpha of .94 and a Guttman split half of .94 (Lehman, 2000). Additional evidence for the internal consistency of the FIS was provided in two studies which found Cronbach alphas for FIS subscales to range from .72 to .86, and for the FIS total scale alphas ranged from .80 to .93 (Levant et al., 2007; Richmond et al., 2015). With regard to the FIS-SF, Cronbach alphas for subscales ranged from .82 to .88, and for the FIS total scale = .85 (Levant et al., 2017).

Validity

Validity for the FIS was initially found with evidence of convergent, and discriminant construct validity (Lehman, 2000). An additional study in 2007 also provided evidence for discriminant and convergent validity of the FIS (Levant et al., 2007). In this study, evidence for discriminant validity was found when the FIS total score and four of its factors were found not to be significantly related to the Femininity subscale of the Bem Sex Role Inventory (BSRI; Bem, 1974) in either male and female participants, with caretaking being minimally related to the BSRI (r = .20). For convergent validity, Levant et al. (2007) examined the relationship between the FIS and the Male Role Norms Inventory-49 (MRNI-49; Berger, Levant, McMillan, Kelleher, & Sellers, 2005). The FIS total score was found to be strongly related to the MRNI-49 Traditional score (r = .69). Additionally, the relationship between the FIS and a measure of feminist identity (Feminist Identity Scale; Bargad & Hyde, 1991) was also examined. The FIS total score was significantly and positively related with the Passive Acceptance (r = .37) and Revelation Stages (r = .14) and significantly negatively correlated with the Active Commitment Stage (r = –.16).

Convergent validity for the FIS-SF general and specific factors have been supported for both men and women through assessing validity in a latent variable context. (Levant et al., 2017). Specifically, the validity evidence supported interpretation of the FIS-SF general factor as reflecting TFI in general. Partial convergent validity was found for the *Purity* factor in men and in the *Emotionality/Traditional Roles* factor for women.

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Exhibit

Femininity Ideology Scale—Short Form

Please complete this questionnaire by circling the number which best indicates your level of agreement or disagreement with each statement.

	1 Strongly Disagree	2 Moderately Disagree	3 Neutral	4 Moderately Agree	5 Strongly Agree
1. A woman's worth should be measured by the success of her partner.	○	○	○	○	○
2. Women should not succeed in the business world because men will not want to marry them.	○	○	○	○	○
3. A woman should not expect to be sexually satisfied by her partner.	○	○	○	○	○
4. A woman should not be competitive.	○	○	○	○	○
5. A woman should remain a virgin until she is married.	○	○	○	○	○
6. Woman should not read pornographic magazines.	○	○	○	○	○
7. It is not acceptable for a woman to masturbate.	○	○	○	○	○
8. A woman should not tell dirty jokes.	○	○	○	○	○
9. It is expected that women will have a hard time handling stress without getting emotional.	○	○	○	○	○
10. It is expected that women in leadership roles will not be taken seriously.	○	○	○	○	○
11. It is expected that women will be viewed as overly emotional.	○	○	○	○	○
12. It is expected that a single woman is less fulfilled than a married woman.	○	○	○	○	○

The Male Role Norms Inventory

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Since its original publication in 1992, the Male Role Norms Inventory (MRNI; Levant et al., 1992) and its revised versions have been used in at least 91 studies with over 30,000 participants (Gerdes, Alto, Jadaszewski, D'Auria, & Levant, 2018). Those versions include the MRNI-49, the MRNI-R and MRNI-SF, and two versions developed for adolescents (MRNI-A and MRNI-A-r). The MRNI is a measure of masculinity ideologies, a central construct in the Gender Role Strain Paradigm (GRSP; Pleck, 1981). The GRSP posits that gender roles are adopted during childhood socialization under the influence of gender ideologies, continue into adulthood, and result in gender role strain, stress, and conflict (Levant 2011; Levant & Richmond, 2016; Pleck, 1981, 1995). Levant & Richmond (2007) described masculinity ideologies as "an individual's internalization of cultural belief systems and attitudes toward masculinity and men's roles" (p. 131), and Thompson and Pleck (1995) described "traditional masculinity ideology" (TMI) as beliefs about the norms for masculine behavior in a patriarchal society. MRNI items specifically avoid overt comparisons to women. It was designed to examine the extent to which both men and women endorse these cultural beliefs (Levant & Richmond, 2007; Levant & Richmond, 2016). This entry documents four versions of the MRNI: the original version (Levant et al., 1992), the MRNI Revised version (MRNI-R; Levant et al., 2007), the MRNI Short Form (MRNI-SF; Levant, Hall, & Rankin, 2013), and the MRNI Adolescent-revised (MRNI-A-r; Levant et al., 2012).

Development

The MRNI was developed to address psychometric limitations of the then-extant masculinity measure—the Brannon Masculinity Scale (Brannon & Juni, 1984). It did so by utilizing a set of subscales that better reflected the consensus opinion among masculinity scholars at the time (Levant and Richmond, 2007). The original MRNI (Levant et al., 1992) consists of 57 items grouped into 8 subscales, seven of which measure the norms of TMI (Avoidance of Femininity, Fear and Hatred of Homosexuals, Self-reliance, Aggression, Achievement/Status, Non-relational Attitudes toward Sex, and Restrictive Emotionality) and one which measures Non-Traditional Attitudes toward Masculinity. The MRNI-R (Levant et al., 2007) consists of 53 items grouped into 7 subscales: Avoidance of Femininity, Fear and Hatred of Homosexuals, Extreme Self-reliance, Aggression, Dominance, Non-relational Sexuality, and Restrictive Emotionality. The MRNI-SF (Levant et al., 2013) consists of 21 items grouped into 7 subscales of 3 items each: Avoidance of Femininity, Negative Attitudes toward Sexual Minorities, Self-reliance through Mechanical Skills, Toughness, Dominance, Importance of Sex, and Restrictive Emotionality. The MRNI-A-r (Levant et al., 2012) consists of 29 items grouped into 3 subscales: Avoidance of Femininity; Emotionally Detached Dominance, and Toughness.

Response and Timing

The MRNI and its derivatives include a set of directions at the top of each form, along with an example of the 7-point Likert scale. Digital and paper-based versions of each measure have the same instructions. A strength of agreement statement (e.g., agree, strongly agree, etc.) is centered above each point on the scale. Both paper-and-pencil and digital versions of the scale have the numbers 1–7 listed, and participants are asked to either circle or bubble-in the number that corresponds with their level of agreement with each item. Time to completion for the MRNI is estimated at 20 minutes. Completion time for the MRNI-R and MRNI-A-r is estimated at 15 minutes, while completion time for the MRNI-SF is estimated at 7 minutes.

Scoring

All versions of the MRNI utilize the same 7-point Likert-type response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) for their items. Participants answer questions on beliefs about the norms for what a man *should* do/be. Each version of the MRNI includes both an overall scale assessing TMI as well as a number of subscales that examine specific masculine norms (Gerdes et al., 2018).

For each respective measure, the mean of raw scores of all items is calculated to obtain the overall score for TMI on each measure. For subscales, calculate the mean of the raw scores for all items included in each subscale. Some items are reverse-scored on the original MRNI, but are not on subsequent versions.

In the MRNI, Items 4, 7, 15, 22, 23, 25, 29, 30, 31, 34, 48, and 53 are reverse-scored. The subscales are composed of the following items:

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Homophobia: 1, 8, 27, 42.

Aggression: 12, 17, 32, 49, 52.

Avoidance of Femininity: 5, 26, 28, 33, 36, 41, 47.

Achievement/Status: 2, 3, 13, 18, 24, 37, 55.

Self-Reliance: 6, 10, 19, 21, 38, 50, 56.

Restrictive Emotionality: 11, 16, 20, 35, 44, 45, 57.

Attitudes towards Sex: 9, 14, 39, 40, 43, 46, 51, 54.

Nontraditional Attitudes: 4, 7, 15, 22, 23, 25, 29, 30, 31, 34, 48, 53.

For the MRNI-R, no items are reverse scored. The subscales are composed of the following items:

Disdain for Sexual Minorities: 1, 5, 8, 17, 18, 23, 25, 32, 37, 52.

Aggression: 10, 34, 35, 39, 42, 45, 48.

Avoidance of Femininity: 6, 7, 9, 11, 15, 19, 26, 30.

Dominance: 2, 3, 21, 22, 44, 49, 51.

Extreme Self-Reliance: 4, 12, 13, 14, 27, 29, 36.

Restrictive Emotionality: 31, 33, 38, 41, 46, 47, 50, 53.

Non-relational Attitudes Toward Sexuality: 16, 20, 24, 28, 40, 43.

For the MRNI-SF, no items are reverse scored. The subscales are composed of the following items:

Negativity toward Sexual Minorities: 1, 5, 13.

Toughness: 17, 19, 20.

Avoidance of Femininity: 4, 8, 10.

Dominance: 2, 3, 12.

Self-Reliance through Mechanical Skills: 6, 7, 14.

Restrictive Emotionality: 15, 16, 21.

Importance of Sex: 9, 11, 18.

For the MRNI-A-r, no items are reverse scored. The subscales are composed of the following items:

Emotionally Detached Dominance: 1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 18, 20, 22, 24, 25, 27.

Toughness: 11, 16, 17, 19, 26, 28, 29.

Avoidance of Femininity: 3, 12, 14, 15, 21, 23.

Reliability

The large number of studies utilizing all forms of the MRNI allow for a broad perspective on reliability among these measures. Studies have examined both African American and White college students (Levant & Majors, 1997) in the United States and have compared scores between US and Chinese college students (Levant, Wu, & Fischer, 1996). These specific studies have shown Cronbach's alpha scores ranging from .84 to .88 for total TMI scores, while test–retest reliability for the TMI on the MRNI over a 3-month period was shown to be .72 for women and .65 for men (Heesacker & Levant, 2001). Coefficient alphas for some subscales of the original MRNI have been found to be below.70 (see Levant & Richmond, 2007).

Both the MRNI-R and the MRNI-SF have shown consistently high Cronbach's alphas for TMI, ranging from .92 to .96 (Levant et al., 2007; Levant et al., 2013) and from .72 to .92 for the various subscales of these two MRNI forms (see Levant & Richmond, 2007). For the MRNI-A-r, Levant et al. (2012) found coefficient alphas (separated by gender) ranging from .68 to .89 for all three subscales and the TMI scale.

Validity

Gerdes et al. (2018) noted that the various versions of the MRNI have been correlated with over 70 other related measures, demonstrating convergent construct evidence for validity. Levant & Richmond (2007) also reported discriminant evidence for validity through non-significant correlations between the MNRI and the short form of the Personal Attributes Scale. Recent studies have found evidence that a bifactor model fits better than common factors and hierarchical models (Levant, Hall, & Rankin, 2013), and of construct evidence for validity of the bifactor model of the MRNI-SF using latent variables (Levant, Hall, Weigold, & McCurdy, 2016). Full configural invariance and partial metric invariance (i.e., for the specific factors corresponding to the subscales but not for the general factor corresponding to the total score) have been shown across gender for the MRNI-SF (Levant et al., 2013). Levant & McCurdy (2017) have also demonstrated configural invariance for all factors in the MRNI-SF and partial metric invariance for specific factors across recruitment methods (internet vs. college students). Furthermore, a recent large study (N = 6,744; McDermott et al., 2017) compared men to women, White men to Black and Asian men, and gay men to heterosexual men, finding that the MRNI-SF demonstrated at least partial metric invariance across those groups. Levant et al. (2012) found discriminant evidence for validity in the MRNI-A-r, and Levant et al. (2010) found convergent and concurrent evidence for the validity of the MRNI-R through significant correlations with measures including the Male Role Attitudes Scale and Gender Role Conflict Scale.

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Exhibit

Male Role Norms Inventory

MRNI

Please complete the questionnaire by indicating your level of agreement or disagreement with each statement.

	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 No Opinion	5 Slightly Agree	6 Agree	7 Strongly Agree
1. It is disappointing to learn that a famous athlete is gay.	○	○	○	○	○	○	○
2. If necessary a man should sacrifice personal relationships for career advancement.	○	○	○	○	○	○	○
3. A man should do whatever it takes to be admired and respected.	○	○	○	○	○	○	○
4. A boy should be allowed to quit a game if he is losing.	○	○	○	○	○	○	○
5. A man should prefer football to needlecraft.	○	○	○	○	○	○	○
6. A man should never count on someone else to get the job done.	○	○	○	○	○	○	○
7. Men should be allowed to kiss their fathers.	○	○	○	○	○	○	○
8. A man should not continue a friendship with another man if he finds out that the man is a homosexual.	○	○	○	○	○	○	○
9. Hugging and kissing should always lead to intercourse.	○	○	○	○	○	○	○

10. A man must be able to make his own way in the world.	○	○	○	○	○	○	○
11. Nobody likes a man who cries in public.	○	○	○	○	○	○	○
12. It is important for a man to take risks, even if he might get hurt.	○	○	○	○	○	○	○
13. Men should make the final decision involving money.	○	○	○	○	○	○	○
14. It is important for a man to be good in bed.	○	○	○	○	○	○	○
15. It is okay for a man to ask for help changing a tire.	○	○	○	○	○	○	○
16. A man should never reveal worries to others.	○	○	○	○	○	○	○
17. Boys should be encouraged to find a means of demonstrating physical prowess.	○	○	○	○	○	○	○
18. A man should try to win at any sport he participates in.	○	○	○	○	○	○	○
19. Men should always be realistic.	○	○	○	○	○	○	○
20. One should not be able to tell how a man is feeling by looking at his face.	○	○	○	○	○	○	○
21. A man who takes a long time and has difficulty making decisions will usually not be respected.	○	○	○	○	○	○	○
22. Men should be allowed to wear bracelets.	○	○	○	○	○	○	○
23. A man should not force the issue if another man takes his parking space.	○	○	○	○	○	○	○
24. In a group, it's up to the man to get things organized and moving ahead.	○	○	○	○	○	○	○
25. A man should love his sex partner.	○	○	○	○	○	○	○
26. It is too feminine for a man to use clear nail polish on his fingernails.	○	○	○	○	○	○	○
27. Being called "faggot" is one of the worst insults to a man or boy.	○	○	○	○	○	○	○
28. Jobs like firefighter and electrician should be reserved for men.	○	○	○	○	○	○	○
29. When physically provoked, men should not resort to violence.	○	○	○	○	○	○	○
30. A man should be able to openly show affection to another man.	○	○	○	○	○	○	○
31. A man doesn't need to have an erection in order to enjoy sex.	○	○	○	○	○	○	○
32. When the going gets tough, men should get tough.	○	○	○	○	○	○	○
33. Housework is women's work.	○	○	○	○	○	○	○
34. It is not particularly important for a man to control his emotions.	○	○	○	○	○	○	○
35. Men should not be too quick to tell others that they care about them.	○	○	○	○	○	○	○
36. Boys should prefer to play with trucks rather than dolls.	○	○	○	○	○	○	○
37. It's okay for a man to buy a fast, shiny sports car if he wants, even if he may have to stretch beyond his budget.	○	○	○	○	○	○	○
38. A man should never doubt his own judgement.	○	○	○	○	○	○	○
39. A man shouldn't have to worry about birth control.	○	○	○	○	○	○	○
40. A man shouldn't bother with sex unless he can achieve an orgasm.	○	○	○	○	○	○	○
41. A man should avoid holding his wife's purse at all times.	○	○	○	○	○	○	○

42. There are some subjects which men should not talk about with other men.	○	○	○	○	○	○	○
43. Men should always take the initiative when it comes to sex.	○	○	○	○	○	○	○
44. Fathers should teach their sons to mask fear.	○	○	○	○	○	○	○
45. Being a little down in the dumps is not a good reason for a man to act depressed.	○	○	○	○	○	○	○
46. A man should always be ready for sex.	○	○	○	○	○	○	○
47. Boys should not throw baseballs like girls.	○	○	○	○	○	○	○
48. If a man is in pain, it's better for him to let people know than to keep it to himself.	○	○	○	○	○	○	○
49. Men should get up to investigate if there is a strange noise in the house at night.	○	○	○	○	○	○	○
50. A man should think things out logically and have good reasons for what he does.	○	○	○	○	○	○	○
51. For a man, sex should always be spontaneous, rather than a pre planned activity.	○	○	○	○	○	○	○
52. A man who has no taste for adventure is not very appealing.	○	○	○	○	○	○	○
53. It is not important for men to strive to reach the top.	○	○	○	○	○	○	○
54. For men, touching is simply the first step toward sex.	○	○	○	○	○	○	○
55. A man should always be the major provider in his family.	○	○	○	○	○	○	○
56. A man should be level headed.	○	○	○	○	○	○	○
57. Men should be detached in emotionally charged situations.	○	○	○	○	○	○	○

MRNI-R

Please complete the questionnaire by indicating your level of agreement or disagreement with each statement. Give only one answer for each statement.

	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 No Opinion	5 Slightly Agree	6 Agree	7 Strongly Agree
1. Homosexuals should never marry.	○	○	○	○	○	○	○
2. The president of the U.S. should always be a man.	○	○	○	○	○	○	○
3. Men should be the leader in any group.	○	○	○	○	○	○	○
4. A man should be able to perform his job even if he is physically ill or hurt.	○	○	○	○	○	○	○
5. Men should not talk with a lisp because this is a sign of being gay.	○	○	○	○	○	○	○
6. Men should not wear make-up, cover-up or bronzer.	○	○	○	○	○	○	○
7. Men should watch football games instead of soap operas.	○	○	○	○	○	○	○
8. All homosexual bars should be closed down.	○	○	○	○	○	○	○
9. Men should not be interested in talk shows such as *Oprah*.	○	○	○	○	○	○	○
10. Men should excel at contact sports.	○	○	○	○	○	○	○
11. Boys should play with action figures not dolls.	○	○	○	○	○	○	○
12. Men should not borrow money from friends or family members.	○	○	○	○	○	○	○
13. Men should have home improvement skills.	○	○	○	○	○	○	○
14. Men should be able to fix most things around the house.	○	○	○	○	○	○	○

15. A man should prefer watching action movies to reading romantic novels.	○	○	○	○	○	○	○
16. Men should always like to have sex.	○	○	○	○	○	○	○
17. Homosexuals should not be allowed to serve in the military.	○	○	○	○	○	○	○
18. Men should never compliment or flirt with another male.	○	○	○	○	○	○	○
19. Boys should prefer to play with trucks rather than dolls.	○	○	○	○	○	○	○
20. A man should not turn down sex.	○	○	○	○	○	○	○
21. A man should always be the boss.	○	○	○	○	○	○	○
22. A man should provide the discipline in the family.	○	○	○	○	○	○	○
23. Men should never hold hands or show affection toward another.	○	○	○	○	○	○	○
24. It is okay for a man to use any and all means to "convince" a woman to have sex.	○	○	○	○	○	○	○
25. Homosexuals should never kiss in public.	○	○	○	○	○	○	○
26. A man should avoid holding his wife's purse at all times.	○	○	○	○	○	○	○
27. A man must be able to make his own way in the world.	○	○	○	○	○	○	○
28. Men should always take the initiative when it comes to sex.	○	○	○	○	○	○	○
29. A man should never count on someone else to get the job done.	○	○	○	○	○	○	○
30. Boys should not throw baseballs like girls.	○	○	○	○	○	○	○
31. A man should not react when other people cry.	○	○	○	○	○	○	○
32. A man should not continue a friendship with another man if he finds out that the other man is homosexual.	○	○	○	○	○	○	○
33. Being a little down in the dumps is not a good reason for a man to act depressed.	○	○	○	○	○	○	○
34. If another man flirts with the women accompanying a man, this is a serious provocation and the man should respond with aggression.	○	○	○	○	○	○	○
35. Boys should be encouraged to find a means of demonstrating physical prowess.	○	○	○	○	○	○	○
36. A man should know how to repair his car if it should break down.	○	○	○	○	○	○	○
37. Homosexuals should be barred from the teaching profession.	○	○	○	○	○	○	○
38. A man should never admit when others hurt his feelings.	○	○	○	○	○	○	○
39. Men should get up to investigate if there is a strange noise in the house at night.	○	○	○	○	○	○	○
40. A man shouldn't bother with sex unless he can achieve an orgasm.	○	○	○	○	○	○	○
41. Men should be detached in emotionally charged situations.	○	○	○	○	○	○	○
42. It is important for a man to take risks, even if he might get hurt.	○	○	○	○	○	○	○
43. A man should always be ready for sex.	○	○	○	○	○	○	○
44. A man should always be the major provider in his family.	○	○	○	○	○	○	○
45. When the going gets tough, men should get tough.	○	○	○	○	○	○	○
46. I might find it a little silly or embarrassing if a male friend of mine cried over a sad love story.	○	○	○	○	○	○	○
47. Fathers should teach their sons to mask fear.	○	○	○	○	○	○	○
48. I think a young man should try to be physically tough, even if he's not big.	○	○	○	○	○	○	○
49. In a group, it is up to the men to get things organized and moving ahead.	○	○	○	○	○	○	○

50. One should not be able to tell how a man is feeling by looking at his face.	○	○	○	○	○	○	○
51. Men should make the final decision involving money.	○	○	○	○	○	○	○
52. It is disappointing to learn that a famous athlete is gay.	○	○	○	○	○	○	○
53. Men should not be too quick to tell others that they care about them.	○	○	○	○	○	○	○

MRNI-SF

Please complete the questionnaire by indicating your level of agreement or disagreement with each statement. Give only one answer for each statement.

	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 No Opinion	5 Slightly Agree	6 Agree	7 Strongly Agree
1. Homosexuals should never marry.	○	○	○	○	○	○	○
2. The president of the U.S. should always be a man.	○	○	○	○	○	○	○
3. Men should be the leader in any group.	○	○	○	○	○	○	○
4. Men should watch football games instead of soap operas.	○	○	○	○	○	○	○
5. All homosexual bars should be closed down.	○	○	○	○	○	○	○
6. Men should have home improvement skills.	○	○	○	○	○	○	○
7. Men should be able to fix most things around the house.	○	○	○	○	○	○	○
8. A man should prefer watching action movies to reading romantic novels.	○	○	○	○	○	○	○
9. Men should always like to have sex.	○	○	○	○	○	○	○
10. Boys should prefer to play with trucks rather than dolls.	○	○	○	○	○	○	○
11. A man should not turn down sex.	○	○	○	○	○	○	○
12. A man should always be the boss.	○	○	○	○	○	○	○
13. Homosexuals should never kiss in public.	○	○	○	○	○	○	○
14. A man should know how to repair his car if it should break down.	○	○	○	○	○	○	○
15. A man should never admit when others hurt his feelings.	○	○	○	○	○	○	○
16. Men should be detached in emotionally charged situations.	○	○	○	○	○	○	○
17. It is important for a man to take risks, even if he might get hurt.	○	○	○	○	○	○	○
18. A man should always be ready for sex.	○	○	○	○	○	○	○
19. When the going gets tough, men should get tough.	○	○	○	○	○	○	○
20. I think a young man should try to be physically tough, even if he's not big.	○	○	○	○	○	○	○
21. Men should not be too quick to tell others that they care about them.	○	○	○	○	○	○	○

MRNI-A-r

Read each question, and then indicate which response best agrees with what you think.

	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 No Opinion	5 Slightly Agree	6 Agree	7 Strongly Agree
1. If needed, a guy should stop being friends with someone to be more popular.	○	○	○	○	○	○	○
2. Guys should do whatever it takes to be cool.	○	○	○	○	○	○	○
3. A guy should prefer football to sewing.	○	○	○	○	○	○	○
4. A guy should never depend on someone else to help him.	○	○	○	○	○	○	○

5.	Guys shouldn't cry, especially in front of others.	○	○	○	○	○	○	○
6.	When in a group of guys and girls, guys should always make the final decision.	○	○	○	○	○	○	○
7.	It is not okay for a guy to ask for help fixing a flat tire on his bike.	○	○	○	○	○	○	○
8.	Guys should never tell others if they're worried or afraid.	○	○	○	○	○	○	○
9.	A guy should win at any game he plays.	○	○	○	○	○	○	○
10.	Guys shouldn't ever show their feelings.	○	○	○	○	○	○	○
11.	A guy who can't make up his mind will not be respected.	○	○	○	○	○	○	○
12.	Guys should not be allowed to wear skirts.	○	○	○	○	○	○	○
13.	In a group of guys and girls, it is up to the guys to get things organized and moving ahead.	○	○	○	○	○	○	○
14.	It is too girlish for a guy to wear make-up.	○	○	○	○	○	○	○
15.	Sports like softball should not be played by guys.	○	○	○	○	○	○	○
16.	If someone else starts it, a guy should be allowed to use violence to defend himself.	○	○	○	○	○	○	○
17.	When the going gets tough, guys get tough.	○	○	○	○	○	○	○
18.	Chores like doing the laundry or cooking aren't for guys.	○	○	○	○	○	○	○
19.	It's important for a guy to be able to play it cool.	○	○	○	○	○	○	○
20.	Guys should not tell their friends they care about them.	○	○	○	○	○	○	○
21.	Guys should play with trucks rather than dolls.	○	○	○	○	○	○	○
22.	It's important to have the newest video game system.	○	○	○	○	○	○	○
23.	Guys shouldn't carry purses.	○	○	○	○	○	○	○
24.	Guys shouldn't show fear.	○	○	○	○	○	○	○
25.	When they're sad or upset, guys should just "suck it up" and get over it.	○	○	○	○	○	○	○
26.	Boys should not throw baseballs "like a girl."	○	○	○	○	○	○	○
27.	If a guy is in pain, it's better for him to keep it to himself rather than to let people know.	○	○	○	○	○	○	○
28.	A guy with no interest in adventure is not very cool.	○	○	○	○	○	○	○
29.	It's important for guys to try hard to be the best.	○	○	○	○	○	○	○

17 HIV/STI Attitudes and Behaviors

Sexual Risk Behavior Beliefs and Self-Efficacy Scales

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The Sexual Risk Behavior Beliefs and Self-Efficacy (SRBBS) scales were developed to measure important psychosocial variables affecting sexual risk-taking and protective behavior. It was originally a component of a larger questionnaire used in evaluating the effectiveness of a multicomponent, school-based program to prevent Human Immunodeficiency Virus (HIV), sexually transmitted disease (STD), and pregnancy among high school students (Coyle et al., 1996). The variables measured by the SRBBS scales are attitudes, norms, self-efficacy, and barriers to condom use. These variables were derived from the Theory of Reasoned Action (Fishbein & Ajzen, 1975), Bandura's Social Learning Theory (Bandura, 1986), and the Health Belief Model (Rosenstock, 1974).

Development

The instrument development process for the SRBBS scales involved four stages: (a) identifying the psychosocial constructs relevant to risk behavior for HIV, STD, and pregnancy; (b) generating questionnaire items by a team of investigators, based on the theories and models described above, empirical research, and other instruments that measured these constructs; (c) pretesting the draft instrument with focus groups of high school students; and (d) revising the instrument and testing it with additional focus groups.

The scales consist of 22 items with a 3- or 4-point Likert-type response format. Three of the scales address sexual risk-taking behavior: *Attitudes About Sexual Intercourse* (ASI, Items 1 and 2), *Norms About Sexual Intercourse* (NSI, Items 6 and 7), and *Self-Efficacy in Refusing Sex* (SER, Items 11 to 13). Five scales address protective behavior: *Attitudes about Condom Use* (ACU, Items 3 to 5), *Norms About Condom Use* (NCU, Items 8 to 10), *Self-Efficacy in Communication about Condoms* (SECM, Items 14 to 16), *Self-Efficacy in Using and Buying Condoms* (SECU, Items 17 to 19), and *Barriers to Condom Use* (BCU, Items 20 to 22). These scales have been used with students of various ethnic groups and have been translated into Spanish. In our research, we have used the SRBBS scales with high school students (aged 14 to 18). They have also been used with middle school students (grades 7 and 8) in another study.

Response Mode and Timing

The SRBBS scales have been used as part of a larger 110-item self-administered questionnaire that takes approximately 30–45 minutes to complete. The scales were originally printed on a form that can be optically scanned. In that form, respondents marked the circle corresponding to their response (the form did not include a numeric value for the responses). The scales can be adapted so that respondents circle or mark the appropriate response on a form that cannot be optically scanned.

Scoring

Two items (Item 2 and Item 7) should be scored in reverse. Scores on individual items in a scale are totaled and then

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divided by the number of items in the scale. This gives the scale scores the same range as the response values, enabling the user to compare the scale scores to the original response categories with ease. The range of the ASI, ACU, NSI, NCU, and BCU is 1–4, and the range of SER, SECM, and SECU is 1–3.

Reliability

An analysis of data from a multiethnic sample of 6,213 high school students from Texas and California provides all information on reliability and validity (Basen-Engquist et al., 1996).

In a sample of 6,213 high school students from Texas and California (Basen-Engquist et al., 1996), the Cronbach alpha measuring internal consistency reliability for the each of the scales was as follows: attitudes about sexual intercourse, .78; norms about sexual intercourse, .78; self-efficacy for refusing sex, .70; attitudes about condom use, .87; norms about condom use, .84; self-efficacy in communicating about condoms, .66; self-efficacy in buying and using condoms, .61; and barriers to condom use, .73.

Validity

Confirmatory factor analysis was used to assess construct validity. Two models were evaluated, one with items relating to sexual risk-taking behavior, the other with items relating to protective behavior. The sexual risk behavior model included three scales: ASI, NSI, and SER. In the development of the model, we discovered that correlated error terms were required between norm and attitude items that were grammatically similar in order to obtain a model that fit the data. The fit indices indicated that the final data fit the model well (that is, the χ^2 was not significant, the residuals were normally distributed, and root mean square error of approximation was < .05). The final protective behavior model included five scales: CU, NCU, SECM, SECU, and BCU. The fit indices indicated a good fit for this model as well, once paths for correlated error terms between grammatically similar attitude and norm items were added.

Concurrent validity was assessed by examining specific relationships between the scales and sexual experience in the high school sample. The sexual risk behavior scales differentiated between the sexually experienced and those who have never had sexual intercourse. The results indicated that attitudes and perceived norms of students who had never had sexual intercourse were less supportive of having sexual intercourse than were those of sexually experienced respondents (Effect $size_{ASI}$ = 1.09; Effect $size_{NSI}$ = .90 [Effect size = | $Mean_1$ – $Mean_2$ | / Pooled standard deviation]). In addition, students who were sexually experienced had lower self-efficacy for refusing sex than did students who were not (Effect $size_{SER}$ = .57). Similar findings were observed in comparisons of students who had sexual intercourse in the last 3 months with those who did not.

We also examined students' condom use and their related attitudes and norms. Protective behavior scales differentiated sexually active students who were consistent condom users from those who were not. Consistent condom users had more positive attitudes toward condom use and more favorable perceived norms about condom use than inconsistent users (Effect $size_{ACU}$ = .78; Effect $size_{NCU}$ = .56). Self-efficacy for using and buying condoms and communicating about condom use with partners also were higher for the consistent condom users (Effect $size_{SECM}$ = .47; Effect $size_{SECU}$ = .23; Effect $size_{BCU}$ = .20). In addition, the consistent users found carrying or buying condoms to be less of a barrier than did the inconsistent users.

Concurrent validity also was assessed by hypothesizing specific relationships between the scales and age and gender, and then testing these hypotheses in the high school sample. We hypothesized that girls would have higher scores on norms about sexual intercourse, attitudes about sexual intercourse, self-efficacy for refusing sexual intercourse, attitudes about condom use, norms about condom use, and self-efficacy in communicating about condoms, but lower scores on condom use self-efficacy. These hypotheses were confirmed. We also hypothesized that age would be positively related to all three self-efficacy scales and negatively related to norms and attitudes. These hypotheses were also confirmed, with one exception. Younger students reported higher self-efficacy in refusing sex than older students (Basen-Engquist et al., 1996).

Other Information

This work was conducted under Contract #200–91–0938 with the Centers for Disease Control and Prevention.

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Exhibit

Sexual Risk Behavior Beliefs and Self-Efficacy Scales

Please fill in the answer for each question that best describes how *you* feel.

	1 Definitely No	2 Probably No	3 Probably Yes	4 Definitely Yes
1. I believe people my age should wait until they are older before they have sex.	○	○	○	○
2. I believe it's OK for people my age to have sex with a steady boyfriend or girlfriend.	○	○	○	○
3. I believe condoms (rubbers) should always be used if a person my age has sex.	○	○	○	○
4. I believe condoms (rubbers) should always be used if a person my age has sex, even if the girl uses birth control pills.	○	○	○	○
5. I believe condoms (rubbers) should always be used if a person my age has sex, even if the two people know each other very well.	○	○	○	○

The following questions ask you about your *friends* and what they think. Even if you're not sure, mark the answer that you think best describes what they think.

	1 Definitely No	2 Probably No	3 Probably Yes	4 Definitely Yes
6. Most of my friends believe people my age should wait until they are older before they have sex.	○	○	○	○
7. Most of my friends believe it's OK for people my age to have sex with a steady boyfriend or girlfriend.	○	○	○	○
8. Most of my friends believe condoms (rubbers) should always be used if a person my age has sex.	○	○	○	○
9. Most of my friends believe condoms (rubbers) should always be used if a person my age has sex, even if the girl uses birth control pills.	○	○	○	○
10. Most of my friends believe condoms (rubbers) should always be used if a person my age has sex, even if the two people know each other very well.	○	○	○	○

How sure are you? What if the following things happened to you? Imagine that these situations were to happen to you. Then tell us how sure you are that you could do what is described.

	1 Not Sure at All	2 Kind of Sure	3 Totally Sure
11. Imagine that you met someone at a party. He or she wants to have sex with you. Even though you are very attracted to each other, you're not ready to have sex. How sure are you that you could keep from having sex?	○	○	○
12. Imagine that you and your boyfriend or girlfriend have been going together, but you have not had sex. He or she really wants to have sex. Still, you don't feel ready. How sure are you that you could keep from having sex until you feel ready?	○	○	○

13.	Imagine that you and your boyfriend or girlfriend decide to have sex, but he or she will not use a condom (rubber). You do not want to have sex without a condom (rubber). How sure are you that you could keep from having sex, until your partner agrees it is OK to use a condom (rubber)?	○	○	○
14.	Imagine that you and your boyfriend or girlfriend have been having sex but have not used condoms (rubbers). You really want to start using condoms (rubbers). How sure are you that you could tell your partner you want to start using condoms (rubbers)?	○	○	○
15.	Imagine that you are having sex with someone you just met. You feel it is important to use condoms (rubbers). How sure are you that you could tell that person that you want to use condoms (rubbers)?	○	○	○
16.	Imagine that you or your partner use birth control pills to prevent pregnancy. You want to use condoms (rubbers) to keep from getting STD or HIV. How sure are you that you could convince your partner that you also need to use condoms (rubbers)?	○	○	○
17.	How sure are you that you could use a condom (rubber) correctly or explain to your partner how to use a condom (rubber) correctly?	○	○	○
18.	If you wanted to get a condom (rubber), how sure are you that you could go to the store and buy one?	○	○	○
19.	If you decided to have sex, how sure are you that you could have a condom (rubber) with you when you needed it?	○	○	○

What do you think about condoms? Please tell us how much you agree or disagree with the following statements.

		1 I Strongly Disagree	2 I Kind of Disagree	3 I Kind of Agree	4 I Strongly Agree
20.	It would be embarrassing to buy condoms (rubbers) in a store.	○	○	○	○
21.	I would feel uncomfortable carrying condoms (rubbers) with me.	○	○	○	○
22.	It would be wrong to carry a condom (rubber) with me because it would mean that I'm planning to have sex.	○	○	○	○

Safe Sex Behavior Questionnaire

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The Safe Sex Behavior Questionnaire (SSBQ) was designed to measure frequency of use of recommended practices that reduce one's risk of exposure to, and transmission of, HIV.

Development

An information pamphlet sent in May and June of 1988 to all U.S. households by the Surgeon General's office, *Understanding AIDS*, was used as a guide to select items that reflect safe-sex practices (DiIorio, Parsons, Lehr, Adame, & Carlone, 1992). All references to safe-sex practices within the pamphlet were identified and classified into one of the following categories: (a) protection during intercourse, (b) avoidance of risky behaviors, (c) avoidance of bodily fluids, and (d) interpersonal skills. Based on these statements, 27 items were written and selected for review by content experts. Experts were asked to evaluate each item for meaning, clarity, and correspondence to the definition of

safe-sex behaviors, which were defined as "sexually-related practices, which avoid or reduce the risk of exposure to HIV and the transmission of HIV." Based on their reviews, all 27 items were retained for the final version, with some minor changes in wording. Factor analysis indicated five factors with eigenvalues greater than 1.0: *risky behaviors, assertiveness, condom use, avoidance of bodily fluids*, and *avoidance of anal sex*. Three weak items (6, 7, and 16) were identified and dropped to form the 24-item SSBQ.

Response Mode and Timing

Each of the 24 SSBQ items is rated on a 4-point scale from 1 (*Never*) to 4 (*Always*). The SSBQ takes about 5 to 10 minutes to complete. The format of the scale can be modified to use with computer-assisted interview (CAI) programs or face-to-face interviews. The items do not usually require explanation.

Scoring

Of the 24 SSBQ items, 15 are worded positively and 9 negatively. The 15 positively worded items are 1, 3, 4, 5, 6, 8, 9, 10, 11, 12, 16, 17, 18, 19, and 21.

The negatively worded items are reverse coded prior to summing the items. A total score is found by summing responses to the 24 individual items. Total scale scores range from 24 to 96, with higher scores indicating greater frequency of use of safer-sex practices.

Reliability

Initial reliability of the 27-item SSBQ based on responses from a sample of 89 sexually active college students was .82 (coefficient alpha), indicating a moderate degree of internal consistency reliability. Test–retest reliability was assessed using responses from a sample of 100 sexually active college students who completed the scale twice, 2 weeks apart. The correlation was .82, indicating moderate stability. Internal consistency reliability was assessed using a second sample of sexually active college students (N = 531). The alpha coefficient for the 24 items was .82. Based on data collected from a sample (N = 584) of sexually active college students in 1994, the estimated reliability coefficient (Cronbach's alpha) for the SSBQ 24-item instrument was .82 (DiIorio, Dudley, Lehr, & Soet, 2000).

Validity

Construct validity of the scale was assessed using hypothesis testing and factor analysis. The SSBQ correlated in the predicted directions with the concepts of risk taking and assertiveness (DiIorio, Parsons, Lehr, Adame, & Carlone, 1993).

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Exhibit

Safe Sex Behavior Questionnaire

Below is a list of sexual practices. Please read each statement and respond by indicating your degree of use of these practices.

	1 Never	2 Sometimes	3 Most of the Time	4 Always
1. I insist on condom use when I have sexual intercourse.	○	○	○	○
2. I use cocaine or other drugs prior to or during sexual intercourse.	○	○	○	○
3. I stop foreplay long enough to put on a condom (or for my partner to put on a condom).	○	○	○	○
4. I ask potential sexual partners about their sexual histories.	○	○	○	○
5. I avoid direct contact with my sexual partner's semen or vaginal secretions.	○	○	○	○
6. I ask my potential sexual partners about a history of bisexual/homosexual practices.	○	○	○	○
7. I engage in sexual intercourse on a first date.	○	○	○	○
8. I abstain from sexual intercourse when I do not know my partner's sexual history.	○	○	○	○
9. I avoid sexual intercourse when I have sores or irritation in my genital area.	○	○	○	○

10.	If I know an encounter may lead to sexual intercourse, I carry a condom with me.	○	○	○	○
11.	I insist on examining my sexual partner for sores, cuts, or abrasions in the genital area.	○	○	○	○
12.	If I disagree with information that my partner presents on safer sex practices, I state my point of view.	○	○	○	○
13.	I engage in oral sex without using protective barriers such as a condom or rubber dam.	○	○	○	○
14.	If swept away in the passion of the moment, I have sexual intercourse without using a condom.	○	○	○	○
15.	I engage in anal intercourse.	○	○	○	○
16.	I ask my potential sexual partners about a history of IV drug use.	○	○	○	○
17.	If I know an encounter may lead to sexual intercourse, I have a mental plan to practice safer sex.	○	○	○	○
18.	If my partner insists on sexual intercourse without a condom, I refuse to have sexual intercourse.	○	○	○	○
19.	I avoid direct contact with my sexual partner's blood.	○	○	○	○
20.	It is difficult for me to discuss sexual issues with my sexual partners.	○	○	○	○
21.	I initiate the topic of safer sex with my potential sexual partner.	○	○	○	○
22.	I have sexual intercourse with someone who I know is a bisexual or gay person.	○	○	○	○
23.	I engage in anal intercourse without using a condom.	○	○	○	○
24.	I drink alcoholic beverages prior to or during sexual intercourse.	○	○	○	○

The Brief Seroadaptive Assessment Tool for Men Who Have Sex with Men

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The Brief Seroadaptive Assessment Tool (B-SAT) is a self-administered, computerized questionnaire that can be used in clinical, community, and research settings to quickly assess a range of behavioral strategies men who have sex with men (MSM) use to manage their HIV risk.

Development

Seroadaptive behaviors—altering one's sexual behavior based on the HIV status of a partner—are complex and have been historically measured within the context of research studies (i.e., multiple questions for all enumerated sexual partners over a given time period). The complexity of these assessments can present challenges to implement in clinical (e.g., as part of routine medical care) and community-based settings. The addition of biomedical strategies (e.g, PrEP for those who are HIV-negative (CDC, 2014, 2015) and Treatment as Prevention (TasP) for those who are HIV-positive (McCray & Mermin, 2017) presents an added layer of measurement complexity (Jin et al., 2015). Measures that take into consideration PrEP and TasP are needed and must captures sufficient data without undue measurement burden. To address this gap, we developed the Brief Seroadaptive Assessment Tool (B-SAT). We reviewed literature to identify extant self-administered measures of sexual behavior as they related to HIV risk among MSM. Our goal was

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to identify the types of questions related to relationships with partners (e.g., main partners, casual partners, "fuck buddies"), response options (e.g., yes/no, categorical, continuous), language used in questions (e.g., "oral sex," "blow job"), recall window (e.g., last sex partner, last 30 days, last 90 days, lifetime), and HIV status disclosure. We then generated an open-ended interview guide for focus groups.

Between December 2015 and January 2016, we conducted five focus groups with diverse groups of MSM in New York City (NYC; $N = 32$). Mean age was 34.7 (range 22–57), 87.5 percent self-identified as gay, 34 percent were HIV-positive, 56.4 percent were HIV-negative (two HIV-negative men said they were on PrEP), and 6.3 percent said they did not know their status. Participants were identified via Targeted Sampling (Watters & Biernacki, 1989) and had to be over the age of 18, cisgender male, and report sex with other men. Focus groups were around 45 minutes in length, and were audio recorded

Participants were presented with sample items to be included on the B-SAT and queried on a range of topics previously described, as well as comfort with having the questions be self-administered versus interviewer administered, comfort with having responses shared with a medical provider, number of items (e.g., response burden/fatigue), comprehension of questions and response choices, and appropriateness of wording for diverse samples of individuals (e.g., HIV-positive men, men of color). Finally, participants were asked to identify topics that were superfluous (e.g., questions perceived as unnecessary in order for a medical provider to make informed treatment decisions) as well as topics not discussed that participants felt should have been asked (e.g., "What topics have we not talked about today do you feel a provider would need to know about you in order to make an informed treatment decision?")

First, participants overwhelmingly preferred colloquial terms like "fuck," "suck," and "cum" over more technical language like "anal insertive," "oral sex," and "ejaculation." Participants also indicated that this is language they would feel comfortable using with their medical provider and otherwise in clinical/medical settings.

Second, participants agreed that a 3-month recall window for prior sexual behavior would be ideal. Although participants indicated that they would be able to report the greatest accuracy about their most recent sex partner, and potentially have greater accuracy reporting on a 1-month recall window, these were perceived as insufficient for their overall patterns of sexual behavior (i.e., left-censoring). In contrast, participants indicated that 6- or 12-month recall windows were too long in order to generate accurate data and might create undue response/recall burden.

Third, participants felt it was necessary to ask about a main sex partner separately from all other sex partners as behavior was generally seen to be different with a main partner (e.g., lower condom use), and HIV-status disclosure was seen as more trustworthy compared with all other sex partners. However, although participants recognized that behavior may be different with a trusted repeat partner (e.g., a fuck buddy), they indicated that assessing behavior with repeat partners distinctively from other casual male partners would be too complicated and lengthen the assessment unreasonably.

Fourth, participants felt it would be reasonable to assess behaviors of partners distinctively by partner's HIV status, specifically for partners known to be HIV-positive and undetectable, partners known to be HIV-positive but viral load was unknown or otherwise detectable, partners known to be HIV-negative, partners known to be HIV-negative and on PrEP, and all other partners (e.g., partner said he does not know his HIV status, or HIV status was not discussed).

From these qualitative focus groups, the B-SAT was finalized and programmed into an electronic survey tool (i.e., Qualtrics). To determine time to completion, we tested the B-SAT with MSM in a variety of settings, including via tablet devices and computer. We administered the B-SAT in sexual health clinics in NYC ($n = 162$), online with men from all 50 states ($n = 2676$), on mobile smart phones with MSM recruited through a sexual networking app ($n = 1891$), and in NYC gay neighborhood settings (e.g., gay bars; $n = 292$). The sample included 707 HIV-positive and undetectable men, 55 HIV-positive men who said their viral load was detectable or otherwise did not know their viral load, 599 HIV-negative men on PrEP, 3,346 HIV-negative men who were not on PrEP and 313 men who did not know their HIV status or were unsure. One-third (33.8%) were men of color. Participants took between three and seven minutes to complete the B-SAT depending on their sexual behavior (Grov et al., 2018).

Response Mode and Timing

The B-SAT is self-administered and includes skip logic. For these reasons, the B-SAT is best administered via computer/survey software. The assessment takes between ~3 to 7 minutes to complete.

Scoring

The B-SAT is a descriptive measure of sexual behavior in the prior 3 months for men who have sex with men. It does not have sub-scales; however, varying constellations of risk reduction strategies can be derived from the measure. These include serosorting (i.e., having sex partners are the same HIV status), strategic positioning (i.e., determining if HIV-positive men act as the anal receptive partner when their partner is not the same HIV status, or the extent that HIV-negative MSM act as the anal insertive partner if their partner is not the same HIV status), biomed sorting (i.e., having sex with partners who are on PrEP or virally suppressed if HIV-positive) (Grov et al., 2018) and biomed matching (i.e., men on PrEP partnering with others on PrEP, or virally suppressed HIV-positive men seeking out other HIV undetectable partners) (Newcomb, Mongrella, Weis, McMillen, & Mustanski, 2016).

Validity

The B-SAT is a self-reported and descriptive measure. It is subject to self-reporting biases including forward telescoping (i.e., including behaviors that happened greater than 3 months ago in their self-report) and forgetting. The use of anchor dates for when the 3-month recall window falls can help to avoid some of these biases. Men who are very sexually active may have less reliable data. Further, to reduce social desirability, we recommend the B-SAT be completed in privacy.

Variations of the Measure

Items under topic 8 of the B-SAT are assessed as yes/no responses. These can be modified to enumerated responses (i.e., "with your XX HIV-positive and undetectable partners, how many times did you fuck (topped) with no condom?"). We urge caution in using this variation, however, given the feedback we received from the focus groups. Focus group participants felt this level of granularity might be difficult for them to remember.

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Exhibit

The Brief Seroadaptive Assessment Tool

1. Are you currently in a relationship with someone to whom you feel committed? This could be a "boyfriend," "girlfriend," "partner," or anyone with whom you consider your relationship to be romantic.

   ○ Yes
   ○ No

2. What is your main partner's gender identity?

   ○ Male
   ○ Female
   ○ Transgender female
   ○ Transgender male

3. In the last 3 months (90 days; since XX/XX/XX), with your main partner, how many times did you …

	Once a month = 3 times	Twice a month = 6 times	Once a week = 12 times	Twice a week = 24 times	3 times a week = 36 times	4 times a week = 48 times	Every day = 90 times
… fuck him (you topped) with *no* condom?	○	○	○	○	○	○	○
… fuck him (you topped) *with* a condom?	○	○	○	○	○	○	○
… get fucked (you bottomed) with *no* condom?	○	○	○	○	○	○	○
… get fucked (you bottomed) *with* a condom?	○	○	○	○	○	○	○
… choose to in mutual masturbation or oral sex only instead of having anal sex?	○	○	○	○	○	○	○

4. What is your main partner's HIV status?

   ○ My partner told me he/she is HIV-positive (if checked, go to 5 a)
   ○ I think my partner is HIV-positive (if checked, go to 6)
   ○ I don't know my partner's HIV status (if checked, go to 6)
   ○ I think my partner is HIV-negative (if checked, go to 6)
   ○ My partner told me he/she is HIV-negative (if checked, go to 5b)

5. a. Is your main partner's HIV viral load undetectable? Being undetectable means that their HIV treatment is working well and the amount of HIV in their blood is below the levels and a lab test can detect. (Note: This does not mean the person has been cured, it simply means it has been suppressed to low levels by medication.)

      ○ Yes
      ○ No
      ○ I don't know

   b. Is your main partner on pre-exposure prophylaxis (PrEP)?

      ○ Yes
      ○ No
      ○ I don't know

6. Have you had any casual male partners in the last 3 months (90 days, since XX/XX/XX)? By sex, we mean any sexual contact that could lead to an orgasm.

   ○ Yes
   ○ No

For the next section, we will ask you about your casual male partners. Also, we will ask you about the HIV status of your partners. For HIV-positive partners, we will want to know whether or not they were "undetectable." Being undetectable means that their HIV treatment is working well and the amount of HIV in their blood is below the levels that a lab test can detect. (Note: This does not mean the person has been cured, it simply means it has been suppressed to low levels of medication.) For HIV-negative partners, we will want to know whether or not the partner was known to be taking PrEP.

7. How many of your casual male sexual partners last 3 months (90 days, since XX/XX/XX)?

   ○ Told you they were HIV-positive and undetectable
   ○ Told you they were HIV-positive but you didn't know their viral load OR they had a detectable viral load
   ○ Told you they were HIV-negative and on PrEP
   ○ Told you they were HIV-negative but you didn't know if they were on PrEP OR they weren't on PrEP
   ○ Did not tell you their HIV status

8. With your male partners in the last 3 months (since XX/XX/XX), please indicate whether or not you did each of the following with any of those partners. Did you …

	With the [XX] who were HIV-positive and Undetectable	With the [XX] who were HIV-positive, but viral lord was not discussed (or was detectable)	With the [XX] who were HIV-negative and on PrEP	With the [XX] who were HIV-negative, but moron PrEP (or PrEP was not discussed)	With the [XX] who didn't tell you their HIV status or whose HIV status you did not know
fuck (topped) with *no* condom?	○	○	○	○	○
fuck (topped) *with* a condom?	○	○	○	○	○
get fucked (you bottomed) with *no* condom?	○	○	○	○	○

get fucked (you bottomed) *with* a condom?	○	○	○	○	○
choose to engage in mutual masturbation or oral sex only instead of having anal sex?	○	○	○	○	○

9. What is your HIV status?

   ○ HIV-positive and undetectable (if checked, go to 10)
   ○ HIV-positive, but detectable (or "I do not know my viral load") (if checked, go to 10)
   ○ HIV-negative and on PrEP (if checked, go to 11)
   ○ HIV-negative, but not on PrEP (if checked, go to 11)
   ○ I do not know, or I am unsure (if checked, go to 11)

10. a. What year were you diagnosed with HIV?

    _____

    b. How long ago was your viral load tested?

       ○ In the last month
       ○ 1 to 3 months ago
       ○ 3 to 6 months ago
       ○ 6 to 12 months ago
       ○ Greater than 12 months ago
       ○ My viral load has never been tested

11. When was your last HIV test?

    ○ Never tested
    ○ Greater than 5 years ago
    ○ 2 to 5 years ago
    ○ 1 to 2 years ago
    ○ 6 to 12 months ago
    ○ 3 to 6 months ago
    ○ Within the past 3 months

Choose Your Own Sexual Adventure Task

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The 18-item Choose Your Own Sexual Adventure task is an interactive, simulated decision-making task designed as a semi-behavioral measure to assess sexual risk-taking. Based on Vicary and Fraley's (2007) task, the participant becomes the protagonist in three imagined sexual stories/scenarios, each involving another person. In each story, the participant is led to make 18 low or high sexual-risk decisions. To increase accuracy as a measure of sexual risk-taking, the decisions are scored based on normative risk values.

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Development

The questions were based on the sexual risk-taking measure of Ariely and Loewenstein (2006) and adapted to yield behavioral decisions. As many of the original questions involved a new sexual partner, we constructed three different sexual scenarios, one involving meeting a stranger in a bar (8 questions), one involving a new friends-with-benefits situation (5 questions), and one involving meeting a stranger on a trip (5 questions). Although Ariely and Loewenstein's (2006) measure was constructed to be used on men, we modified the questions to apply to both men and women.

For the coding of the Choose Your Own Sexual Adventure task, instead of a binary assignment of scores (e.g., 0 for low sexual-risk decision, 1 for high sexual-risk decision as in Vicary & Fraley, 2007), we assigned normative perceived sexual risk scores for each decision. This results in both a more nuanced and more accurate representation of participants' sexual risk-taking compared to coding different behaviors that vary in their sexual risk with the same weight.

A normative perceived sexual risk score for each decision was determined by presenting each of the sexual decisions (36 total) to 101 participants (49 US Midwestern university undergraduates and 52 U.S. Amazon Mechanical Turk workers, $M_{age} = 27.67$, $SD_{age} = 12.28$) in a semi-randomized order. For each decision, participants were asked to rate how sexually risky the behavior was, on a 9-point scale ranging from 0 (*Not at all risky*) to 8 (*Extremely risky*). The average scores of both the low sexual-risk decisions (range .94–2.83, $M = 1.86$, $SD = .54$) and high sexual-risk decisions (range 4.22–7.29, $M = 5.74$, $SD = .78$) showed significant variation, validating the use of weighted scores for the decisions.

We conducted a confirmatory factor analysis with weighted least squares means and variance adjusted (WLSMV) estimation on the 18 items using 272 undergraduates from a Midwestern university in the US ($M_{age} = 20.91$, $SD_{age} = 3.87$). Our measure demonstrated good fit (CFI = .94, TLI = .93, RMSEA = .043, SRMR = .068) with a one factor solution.

Response Mode and Timing

Participants are presented with instructions detailing how they would be shown three interactive stories in which they would be the protagonist, and the choices they make will affect how the story unfolds. They are encouraged to select the choices they would most likely make in an actual interpersonal situation. Participants then view the three scenarios in a randomized order, each consisting of narrative text and questions/decision points. At each decision point, participants are given the option to choose between two choices/decisions, one low in sexual risk and one high in sexual risk. The order of the choices is randomized. In a similar fashion to the task in Vicary and Fraley's (2007) study, the manner in which the story presented is actually independent of the participant's choices. This allows the number and nature of questions answered by each participant to be consistent, yielding easy comparison of scores across participants. After each scenario is completed, participants are told they would start a new part until they finish the whole task. The task takes an average of 7 minutes to complete when administered via an online program.

Scoring

There are 18 items (what we refer to as decision points) in the measure. For each, the participant chooses between the low risk and high risk decision. We then convert each participant's binary decision into its predetermined perceived sexual-risk score (refer to Development section above). We urge researchers to take care in this process to ensure the correct risk score is assigned to each decision. For example, if the participant chose the low sexual-risk decision on item Q1-1, the choice's risk score of 1.49 is used in the final score calculation. Once this is completed, a mean score of the participant's sexual risk-taking is calculated by averaging those converted decision scores. There are no reversed-scored items. The mean score range is 0–8. The complete SPSS syntax for conversion and calculation of mean sexual risk-taking scores is provided.

Reliability

Across two samples (all undergraduates from a Midwestern university in the US), our measure exhibited adequate internal consistency. For the first sample ($N = 157$, in lab; score $M = 2.92$, $SD = .76$); Cronbach's alpha was .77. For the second sample ($N = 272$, online; score $M = 2.95$, $SD = .69$); Cronbach's alpha was .72.

Validity

To establish the measure's convergent validity, we conducted two studies each using a different sample. The independent variable (urination urge) was assessed using the same measures in both studies. The dependent variable (sexual risk-taking) was assessed in the first study using Ariely & Loewenstein's (2006) questionnaire, and assessed in the second study using our measure. The two studies showed similar results, with higher urination urge predicting greater sexual risk-taking in both men and women.

Summary

The Choose Your Own Sexual Adventure task is a semi-behavioral measure of sexual risk-taking that employs normative sexual risk scores for greater accuracy. The measure detects variation in sexual risk-taking for both men and women, and its semi-behavioral nature overcomes the limitations (e.g., social desirability response bias) of self-report sexuality-related measures (Meston, Heiman, Trapnell, & Paulhus, 1998). This innovative measure has much potential to be used as an alternative for self-report measures assessing sexual risk-taking.

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Exhibit

Choose Your Own Sexual Adventure Task

Instructions, Scenarios, Decision Points, Choices, and Normative Sexual Risk Scores

Name	Explanatory/Narrative Text	Choices/Decisions with Mean and SD of Sexual Risk on 0–8 scale (N = 101)
Instructions	You will now be shown three interactive stories in which you will be the protagonist. At certain points in the story, you will be presented with choices, and these choices will affect the way the narrative unfolds. All of your answers will be completely anonymous, so please select the choices that you would be most likely to make in an actual interpersonal situation.	
Scenario 1: Stranger in a Bar		
Q1-1	It's Friday night, you plan to go out for some drinks. As you're getting ready, you come across a box of condoms in your drawer. Do you take one?	*Low sexual risk*: I'll take one. (M = 1.49, SD = 1.94) *High sexual risk*: I won't take one. (M = 4.95, SD = 2.1)
Q1-2-chose_low	You reached in to take a condom, but found the box is empty. You decide to leave. You arrive at the bar. After a few drinks you're feeling rather courageous and decide to talk to the cute person you've been eyeing since you arrived. You take a seat next to the person at the bar and introduce yourself. After talking for a bit you offer to buy him/her a drink. S/he half-heartedly tells you that s/he has already had a lot to drink, but you are pretty sure that with a little persistence you can convince him/her to buy another drink. Do you try and persuade him/her?	*Low sexual risk*: Decide not to mention anything about another drink. (M = 2.83, SD = 2.5) *High sexual risk*: Try and persuade him/her into having one more drink with you. (M = 5.3, SD = 1.9)
Q1-2-chose_high	You decide to leave. You arrive at the bar. After a few drinks you're feeling rather courageous and decide to talk to the cute person you've been eyeing since you arrived. You take a seat next to the person at the bar and introduce yourself. After talking for a bit you offer to buy him/her a drink. S/he half-heartedly tells you that s/he has already had a lot to drink, but you are pretty sure that with a little persistence you can convince him/her to buy another drink. Do you try and persuade him/her?	

Q1-3	The bar is about to close. At this point you and the person you've been talking to are pretty drunk. You ask him/her if s/he wants to go back to your place. One short cab ride later, you're back at your place. It becomes pretty apparent that sex is a definite possibility with this person. Being drunk, do you think you should have sex with a stranger?	*Low sexual risk*: No. (M = 1.31, SD = 2.24) *High sexual risk*: Yes. (M = 5.64, SD = 1.97)
Q1-4-chose_low	You decide to move on anyway. You begin to wonder how many sexual partners the person has had in the past, and if s/he is clean of sexually transmitted diseases. You,	*Low sexual risk*: Ask him/her about his/her sexual history and health status. (M = 1.92, SD = 2.22)
Q1-4-chose_high	As you decided to move on, you begin to wonder how many sexual partners the person has had in the past, and if s/he is clean of sexually transmitted diseases. You,	*High sexual risk*: Do not ask anything, as asking might be awkward or kill the mood. (M = 5.94, SD = 2.08)
Q1-5-chose_low	S/he tells you that s/he had sex with twenty people before. Hearing that, you decide to:	*Low sexual risk*: Not have sex with him/her. (M = 1.19, SD = 2.09)
Q1-5-chose_high	Although you decide not to ask, you blurt out the question anyway. S/he tells you that s/he had sex with about twenty people before. Hearing that, you decide to:	*High sexual risk*: Continue to have sex with him/her. (M = 6.45, SD = 1.75)
Q1-6-chose_low	Despite your earlier decision to not have sex with him/her, you later find yourself unable to resist his/her sexual allure. Clothes start to come off, and before you know it the two of you are about to have sex. Do you use a condom?	*Low sexual risk*: Yes. (M = 2.71, SD = 2.07)
Q1-6-chose_high	Clothes start to come off, and before you know it the two of you are about to have sex. Do you use a condom?	*High sexual risk*: No. (M = 7.29, SD = 1.34)
Q1-7-chose_low	There are no condoms in the drawer, so you give up. However, your partner insists that a condom is used. You,	*Low sexual risk*: Go check the bathroom for a condom. (M = 2.1, SD = 2)
Q1-7-chose_high	Your partner insists that a condom is used. You,	*High sexual risk*: Try to change his/her mind. (M = 6.63, SD = 1.78)
Q1-8	You find a condom, make sure it is on, and continue with your partner. You start having sex and after a while both of you are about to climax. Suddenly the condom breaks. You,	*Low sexual risk*: Stop having sex. (M = 2.06, SD = 2.31) *High sexual risk*: Continue having sex. (M = 7.1, SD = 1.48)
Scenario 2: New Friends-with-Benefits		
Q2-1	You're having dinner with your friend and talking about how neither of you have had any good sex in a long time. S/he jokingly suggests that you should be friends with benefits. The idea doesn't seem all that bad and you tell him/her that if s/he is serious, you would be "down for that." An hour later, you find yourselves back at your place about to engage in sex. You start to wonder if your friend is free of sexually transmitted diseases.	*Low sexual risk*: Even though s/he is your close friend, you don't know whether or not s/he has an STD. (M = 1.85, SD = 2.27) *High sexual risk*: It's your close friend. So s/he would have told you whether or not s/he has an STD. (M = 5.35, SD = 2.23)

Q2-2	After some heavy petting, you see your friend naked for the first time. Do you stop to quickly eye his/her genitals for any signs of sexually transmitted diseases?	*Low sexual risk*: Casually check him/her out. (*M* = 2.61, *SD* = 2.21) *High sexual risk*: Continue on without stopping. (*M* = 5.33, *SD* = 2.02)
Q2-3	Before you have sex, your friend asks you if you will perform oral sex on him/her. You are not sure about his/her sexual history. What do you do?	*Low sexual risk*: Don't give him/her oral sex. (*M* = 1.41, *SD* = 2.24) *High sexual risk*: Give him/her oral sex. (*M* = 5.58, *SD* = 1.98)
Q2-4-chose_low	You opt not to, but after more foreplay, you eventually change your mind and decide to give your friend oral sex. Do you,	*Low sexual risk*: Get protection and put it on him/her. (*M* = 1.9, *SD* = 2.22)
Q2-4-chose_high	You decide to give your friend oral sex. Do you,	*High sexual risk*: Don't get protection. (*M* = 5.22, *SD* = 2.42)
Q2-5	Foreplay is over and intercourse is about to take place. You find the only condom available expired last year. Do you,	*Low sexual risk*: Go to the store and get a new condom. (*M* = 1.47, *SD* = 2.08) *High sexual risk*: Use the expired condom. (*M* = 5.5, *SD* = 2.08)
Scenario 3: Stranger on a Trip		
Q3-1	While vacationing in California you meet an attractive stranger at a local bar. The two of you really hit it off and s/he offers to give you a tour of the city. At the end of the day, s/he invites you to his/her place for some coffee, to which you agree. The two of you sit on the couch together and keep flirting. You move in close, hoping for a kiss. You then notice that s/he has something that might be sores around the mouth. Do you,	*Low sexual risk*: Stop and do not kiss him/her. (*M* = 2, *SD* = 2.13) *High sexual risk*: Continue and kiss him/her. (*M* = 6.19, *SD* = 2.03)
Q3-2-chose_low	You stop, but then the person wipes his/her mouth and the red sores go away. It seems they were crumbs from the cake you two just had with your coffee. False alarm. The two of you start kissing, and one thing leads to another. Soon the two of you are undressed and things are heating up. Before going any further, you stop him/her and ask if s/he has a condom. S/he tells you that s/he doesn't, but suggests that there are other things you can do with each other instead. S/he brings out some sex toys. They look clean, but you never really know. Do you,	*Low sexual risk*: Refuse and ask about anything else s/he wants to do. (*M* = 2.36, *SD* = 2.42) *High sexual risk*: Decide to engage in some mutual play with the sex toys. (*M* = 5.16, *SD* = 1.91)
Q3-2-chose_high	Before you kiss, the person wipes his/her mouth and the red sores go away. It seems they were crumbs from the cake you two just had with your coffee. False alarm. The two of you start kissing, and one thing leads to another. Soon the two of you are undressed and things are heating up. Before going any further, you stop him/her and ask if s/he has a condom. S/he tells you that s/he doesn't, but suggests that there are other things you can do with each other instead. S/he brings out some sex toys. They look clean, but you never really know. Do you,	

Q3-3-chose_low	Your partner starts kissing you below the waist, with the intention of performing oral sex on you. You consider the fact that you only met this person today. Do you,	*Low sexual risk*: Make him/her stop. (*M* = 1.42, *SD* = 1.95)
Q3-3-chose_high	After the two of you have some fun with the toys, your partner starts kissing you below the waist, with the intention of performing oral sex on you. You consider the fact that you only met this person today. Do you,	*High sexual risk*: Allow him/her to continue. (*M* = 5.24, *SD* = 2.11)
Q3-4-chose_low	You make him/her stop, and you start kissing him/her. After a while, both of you start rubbing each others' privates. You both get more and more turned on and s/he starts dry humping you (rubbing each others' genitals together, but no penetration is involved). Do you,	*Low sexual risk*: Tell him/her to stop even though it feels good. (*M* = 1.89, *SD* = 2.22)
Q3-4-chose_high	After receiving oral, you start kissing him/her. After a while, both of you start rubbing each others' privates. You both get more and more turned on and s/he starts dry humping you (rubbing each others' genitals together, but no penetration is involved). Do you,	*High sexual risk*: Let him/her continue because it feels good. (*M* = 4.22, *SD* = 2.46)
Q3-5	Your partner stops and suggests that the two of you try the "pull out" method as you don't have a condom. Do you,	*Low sexual risk*: Don't have sex. (*M* = .94, *SD* = 1.78) *High sexual risk*: Have sex. (*M* = 6.23, *SD* = 1.82)

Note. Scenarios should be presented in a randomized order with the instructions "Thank you for finishing this story. You will now be shown the next part." in between them.

AIDS Attitude Scale

Jacque Shrum
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The AIDS Attitude Scale (AAS) measures attitudes about AIDS and people who have AIDS or are infected with HIV. The scale can be used to differentiate people who are more empathetic or tolerant toward people who are infected with HIV from those who are less tolerant or empathetic. Subject areas on the AAS include fears related to contagion and casual contact, moral issues, and legal and social welfare issues.

Development

This scale consists of 54 statements with agreement indicated on a 5-point Likert scale with response options labeled SA (*strongly agree*), A (*agree*), N (*neither agree nor disagree*), D (*disagree*), and SD (*strongly disagree*). Items on the scale were selected from an initial pool of 94 items written by undergraduate students in health education and nursing classes, or derived from literature review and interviews with experts knowledgeable about AIDS. Items were reviewed for readability by five undergraduate and graduate students and for acceptability for inclusion on the scale by a panel of four expert judges. Judges agreed on 67 of the original items for inclusion in the scale. The scale was administered to 164 undergraduate students in health education courses, and an item analysis was conducted to identify the statements that could best discriminate high and low scorers. Fifty-four items had statistically significant item-total correlations ($p < .001$). These items were arranged in random order, and the scale was tested for reliability. While the scale was designed to measure college students' attitudes about AIDS, it can be used with other populations.

Response Mode and Timing

Respondents select one response option for each item and typically complete the scale within 15 minutes.

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Scoring

The 25 tolerant items (2, 3, 5, 6, 9, 12, 14, 15, 19, 21, 22, 23, 24, 26, 28, 31, 32, 34, 36, 38, 41, 46, 51, 52, and 53) are scored such that *Strongly Agree* has a value of 5, *Agree* a value of 4, and so forth. For the intolerant items (1, 4, 7, 8, 10, 11, 13, 16, 17, 18, 20, 25, 27, 29, 30, 33, 35, 37, 39, 40, 42, 43, 44, 45, 47, 48, 49, 50, 54), reverse scoring is used. The total attitude score is obtained by the following formula: AAS score = $(X - N)(100)/(N)(4)$, where X is the total of the scored responses and N is the number of items properly completed. This formula standardizes scores such that they may range from 0 to 100; higher scores indicate more empathy or tolerance related to AIDS and people who have AIDS.

Reliability

To measure internal consistency (split-half reliability), 135 undergraduates completed the scale. Reliability was high (Cronbach's alpha = .96; Shrum, Turner, & Bruce, 1989) and confirmed in another independent sample of students (α = .94; Bruce & Reid, 1998). Further, Balogun, et al. (2011) used a subset of the AAS items in a readability and reliability assessment, and found strong test–retest reliability for groups of young adults in the U.S., South Africa, and Turkey.

Validity

Content and face validity were evaluated by a panel of four expert judges: a social worker, a university health educator, a health education faculty member, and an experimental psychologist. Experts were chosen because of their expertise related to AIDS, either in education, counseling, or support services, or related to attitude scale development. The panel assessed the relevance of each item as well as the content of the entire scale (Shrum et al., 1989). Evidence for construct validity through factor analysis shows three consistent factors related to Contagion Concerns, Moral Issues, and Legal/Social Welfare Issues, accounting for over 40 percent of the variance (Bruce, Shrum, Trefethen, & Slovik, 1990; Shrum et al., 1989).

Evidence for known-groups, concurrent, convergent, and discriminant validity of the AAS has been documented by Bruce and Reid (1998) and Bruce and Walker (2001). AAS scores correlate positively with knowledge about AIDS/HIV and negatively with homophobia; this was also reported by Mahaffey and Marcus (1995) among a sample of correctional officers. Further, Ullery and Carney (2000) reported a positive correlation between the AAS and AIDS knowledge scores in a sample of mental health counselors. AAS scores predicted AIDS-related information seeking, as measured before and after celebrity announcements about having AIDS (Bruce, Pilgrim, & Spivey, 1994) and among students who chose to attend a display of the AIDS Memorial Quilt (Bruce & Tarant, 1997). The AAS also differentiated attitudes of college students and clients at a sexually transmitted disease clinic (Bruce & Moineau, 1991). Further, females consistently score more tolerantly than males across college samples (Bruce & Walker, 2001; Torabi & Thiagarajah, 2006). In addition, White et al. (2011) found that health locus of control predicts scores on the AAS in university students.

Other Information

The AAS is published in its entirety in Shrum et al. (1989). In the original scale, "AIDS" was used throughout. Now half of the references to AIDS have been changed to "HIV infection" as more appropriate. There is also a related scale to measure Attitudes about HIV Testing (Boshamer & Bruce, 1999).

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Exhibit

AIDS Attitude Scale

For each of the following statements, please note whether you agree or disagree with the statement. There are no correct answers, only your opinions. Use the following scale:

	Strongly Agree with the Statement	Agree with the Statement	Neither Agree nor Disagree with the Statement	Disagree with the Statement	Strongly Disagree with the Statement
1. Limiting the spread of AIDS is more important than trying to protect the rights of people with AIDS.	○	○	○	○	○
2. Support groups for people with HIV (Human Immunodeficiency Virus) infection would be very helpful to them.	○	○	○	○	○
3. I would consider marrying someone with HIV infection.	○	○	○	○	○
4. I would quit my job before I would work with someone who has AIDS.	○	○	○	○	○
5. People should not be afraid of catching HIV from casual contact, like hugging or shaking hands.	○	○	○	○	○
6. I would like to feel at ease around people with AIDS.	○	○	○	○	○
7. People who receive positive results from the HIV blood tests should not be allowed to get married.	○	○	○	○	○
8. I would prefer not to be around homosexuals for fear of catching AIDS.	○	○	○	○	○
9. Being around someone with AIDS would not put my health in danger.	○	○	○	○	○
10. Only disgusting people get HIV infection.	○	○	○	○	○
11. I think that people with HIV infection got what they deserved.	○	○	○	○	○
12. People with AIDS should not avoid being around other people.	○	○	○	○	○
13. People should avoid going to the dentist because they might catch HIV from dental instruments.	○	○	○	○	○
14. The thought of being around someone with AIDS does not bother me.	○	○	○	○	○
15. People with HIV infection should not be prohibited from working in public places.	○	○	○	○	○
16. I would not want to be in the same room with someone who I knew had AIDS.	○	○	○	○	○
17. The "gay plague" is an appropriate way to describe AIDS.	○	○	○	○	○
18. People who give HIV to others should face criminal charges.	○	○	○	○	○
19. People should not be afraid to donate blood because of AIDS.	○	○	○	○	○
20. A list of people who have HIV infection should be available to anyone.	○	○	○	○	○
21. I would date a person with AIDS.	○	○	○	○	○

22. People should not blame the homosexual community for the spread of HIV infection in the United States.	○	○	○	○	○
23. No one deserves to have a disease like HIV infection.	○	○	○	○	○
24. It would not bother me to attend class with someone who has AIDS.	○	○	○	○	○
25. An employer should have the right to fire an employee with HIV infection regardless of the type of work s/he does.	○	○	○	○	○
26. I would allow my children to play with children of someone known to have AIDS.	○	○	○	○	○
27. People get AIDS by performing unnatural sex acts.	○	○	○	○	○
28. People with HIV should not be looked down upon by others.	○	○	○	○	○
29. I could tell by looking at someone if s/he had AIDS.	○	○	○	○	○
30. It is embarrassing to have so many people with HIV infection in our society.	○	○	○	○	○
31. Health care workers should not refuse to care for people with HIV infection regardless of their personal feelings about the disease.	○	○	○	○	○
32. Children who have AIDS should not be prohibited from going to schools or day care centers.	○	○	○	○	○
33. Children who have AIDS probably have a homosexual parent.	○	○	○	○	○
34. HIV blood test results should be confidential to avoid discrimination against people with positive results.	○	○	○	○	○
35. HIV infection is a punishment for immoral behavior.	○	○	○	○	○
36. I would not be afraid to take care of a family member with AIDS.	○	○	○	○	○
37. If I discovered that my roommate had AIDS, I would move out.	○	○	○	○	○
38. I would contribute money to an HIV infection research project if I were making a charitable contribution.	○	○	○	○	○
39. The best way to get rid of HIV infection is to get rid of homosexuality.	○	○	○	○	○
40. Churches should take a strong stand against drug abuse and homosexuality to prevent the spread of AIDS.	○	○	○	○	○
41. Insurance companies should not be allowed to cancel insurance policies for AIDS-related reasons.	○	○	○	○	○
42. Money being spent on HIV infection research should be spent instead on diseases that affect innocent people.	○	○	○	○	○
43. A person who gives HIV to someone else should be legally liable for any medical expenses.	○	○	○	○	○

44. The spread of AIDS in the United States is proof that homosexual behavior should be illegal.	○	○	○	○	○
45. A list of people who have HIV infection should be kept by the government.	○	○	○	○	○
46. I could comfortably discuss AIDS with others.	○	○	○	○	○
47. People with AIDS are not worth getting to know.	○	○	○	○	○
48. I have no sympathy for homosexuals who get HIV infection.	○	○	○	○	○
49. Parents who transmit HIV to their children should be prosecuted as child abusers.	○	○	○	○	○
50. People with AIDS should be sent to sanitariums to protect others from AIDS.	○	○	○	○	○
51. People would not be so afraid of AIDS if they knew more about the disease.	○	○	○	○	○
52. Hospitals and nursing homes should not refuse to admit patients with HIV infection.	○	○	○	○	○
53. I would not avoid a friend if s/he had AIDS.	○	○	○	○	○
54. The spread of HIV in our society illustrates how immoral the United States has become.	○	○	○	○	○

Alternate Forms of HIV Prevention Attitude Scales for Teenagers

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The lack of valid tools for measuring attitudes toward HIV prevention for adolescents has remained an obstacle to HIV/AIDS education evaluation. Many national authority groups, such as the National Research Council (Coyle, Boruch, & Turner, 1989), have recognized the importance of construction of reliable survey questionnaires in evaluating HIV prevention programs. In addition to knowledge and behavioral outcomes, it is imperative to determine attitude status and how it changes in health education settings.

Research indicates that attitudes are best described as multidimensional, having the three components of cognitive (belief), affective (feeling), and conative (intention to act; Ajzen & Fishbein, 1980; Kothandapani, 1971; Ostrom, 1969). This model has been successfully applied in measurement of attitudes toward alcohol among teenagers (Torabi & Veenker, 1986), prevention of cancer for college students (Torabi & Seffrin, 1986), and sexually transmitted diseases (Yarber, Torabi, & Veenker, 1989).

In testing situations, especially for test–retest design, there is a need for parallel, equivalent, or alternate forms of tests. Tests are considered to be parallel whenever their information functions are identical (Timminga, 1990). For most of educational evaluation using pretest/posttest design, the use of alternate forms is preferred over single forms. Our purpose was to develop alternate attitude-scale forms, using the three-component model, to measure adolescents' attitudes toward HIV and prevention of HIV infection.

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Development

A large pool of Likert-type items was generated, guided by a table of specifications using a three-component attitude theory and conceptual areas related to HIV and HIV prevention (Torabi & Yarber, 1992). A preliminary scale with 50 items was prepared and reviewed by a jury of experts. The jurors provided feedback regarding clarity and content validity. Following revision, the preliminary scale was administered to 210 high school students living in the midwestern United States. After extensive item analyses, two comparable forms with 15 maximally discriminatory items were identified. These alternate forms were simultaneously administered to a representative sample of 600 teenagers in a high school in the midwestern United States. Data were subjected to various techniques of item analysis, factor analysis, and reliability estimation.

The item analysis results provided strong evidence of internal consistency and comparability. The item correlation coefficients were positive and statistically significant for both forms. Additionally, the normative data regarding means, the standard deviations of item scores, and the total scale scores for the two forms were comparable (Torabi & Yarber, 1992). St. Lawrence and colleagues have used the scale among varying populations, including Black adolescents (St. Lawrence et al., 1994), substance dependent adolescents (St. Lawrence, Jefferson, Alleyne, & Brasfield, 1995), low-income Black women (Lawrence et al., 1998), and teenagers with high risk behaviors (St. Lawrence, Crosby, Brasfield, & O'Bannon, 2002).

Response Mode and Timing

Respondents indicate whether they *strongly agree, agree*, are *undecided, disagree*, or *strongly disagree* with each statement. It takes about 10 minutes to complete the scale.

Scoring

The minimum and maximum possible points for each form are 15 and 75 points, with higher scores indicating more positive attitudes toward HIV and HIV prevention.

Scoring for Form A

For Items 7, 8, 11, 13, 15, the scoring is the following: *strongly agree* = 5, *agree* = 4, *undecided* = 3, *disagree* = 2, and *strongly disagree* = 1. For the remaining items, the scoring is the following: *strongly agree* = 1, *agree* = 2, *undecided* = 3, *disagree* = 4, and *strongly disagree* = 5.

Scoring for Form B

For Items 1, 3, 8, 9, 10, 11, 12, 13, 14, 15, the scoring is the following: *strongly agree* = 5, *agree* = 4, *undecided* = 3, *disagree* = 2, and *strongly disagree* = 1. For the remaining items, the scoring is the following: *strongly agree* = 1, *agree* = 2, *undecided* = 3, *disagree* = 4, and *strongly disagree* = 5.

Reliability

Alternate reliability across the form was .82. The alpha reliability for Forms A and B was .78 and .77, and split-half reliability was .76 and .69 (Torabi & Yarber, 1992). Smith, Dane, Archer, Devereaux, & Katner (2000) reported a co-efficient alpha of .70 for Form B of the scale. Torabi, Seo, & Jeng (2004) reported an alpha of .75 for men and .71 for women.

Validity

Evidence of content validity was provided by using a jury of experts, table of specifications, and factor analysis procedures. The factor analyses of both forms identified reasonably comparable factor structures for each form, indicating further evidence of content validity and comparability. It would have been ideal to provide evidence of criterion-related validity by surveying actual behaviors or practices; however, due to serious resistance to assessing minors' sexual and injecting drug behaviors, no such data were obtained.

Because the evidence of validity and reliability of the alternate forms were obtained from a sample of predominantly White, in-school students, the forms may not be appropriate for minority or out-of-school youth.

Other Information

The scales may be utilized in needs assessments and for evaluation of HIV/AIDS education and for measuring teenagers' attitudes toward prevention of HIV infection. The alternate forms are likely more suitable to pretest/posttest HIV education evaluation design.

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Exhibit

Alternative Forms of HIV Prevention Attitudes Scale for Teenagers

Form A

Please read each statement carefully. Record your immediate reaction to the statement by blackening the proper oval on the answer sheet. There is no right or wrong answer for each statement, so mark your own response. Use the below key:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. I would feel very uncomfortable being around someone with HIV.	○	○	○	○	○
2. I feel that HIV is a punishment for immoral behavior.	○	○	○	○	○
3. If I were having sex, it would be insulting if my partner insisted we use a condom.	○	○	○	○	○
4. I dislike the idea of limiting sex to just one partner to avoid HIV infection.	○	○	○	○	○
5. I would dislike asking a possible sex partner to get the HIV antibody test.	○	○	○	○	○
6. It would be dangerous to permit a student with HIV to attend school.	○	○	○	○	○
7. It is easy to use the prevention methods that reduce one's chance of getting HIV.	○	○	○	○	○
8. It is important to talk to a sex partner about HIV prevention before having sex.	○	○	○	○	○
9. I believe that sharing IV drug needles has nothing to do with HIV.	○	○	○	○	○
10. HIV education in schools is a waste of time.	○	○	○	○	○
11. I would be supportive of a person with HIV.	○	○	○	○	○
12. Even if a sex partner insisted, I would not use a condom.	○	○	○	○	○
13. I intend to talk about HIV prevention with a partner if we were to have sex.	○	○	○	○	○

14. I intend not to use drugs so I can avoid HIV.	○	○	○	○	○
15. I will use condoms when having sex if I'm not sure if my partner has HIV.	○	○	○	○	○

Form B

Please read each statement carefully. Record your immediate reaction to the statement by blackening the proper oval on the answer sheet. There is no right or wrong answer for each statement, so mark your own response. Use the below key:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. I am certain that I could be supportive of a friend with HIV.	○	○	○	○	○
2. I feel that people with HIV got what they deserve.	○	○	○	○	○
3. I am comfortable with the idea of using condoms for sex.	○	○	○	○	○
4. I would dislike the idea of limiting sex to just one partner to avoid HIV infection.	○	○	○	○	○
5. It would be embarrassing to get the HIV antibody test.	○	○	○	○	○
6. It is meant for some people to get HIV.	○	○	○	○	○
7. Using condoms to avoid HIV is too much trouble.	○	○	○	○	○
8. I believe that AIDS is a preventable disease.	○	○	○	○	○
9. The chance of getting HIV makes using IV drugs stupid.	○	○	○	○	○
10. People can influence their friends to practice safe behavior.	○	○	○	○	○
11. I would shake hands with a person having HIV.	○	○	○	○	○
12. I will avoid sex if there is a slight chance that the partner might have HIV.	○	○	○	○	○
13. If I were to have sex I would insist that a condom be used.	○	○	○	○	○
14. If I used IV drugs, I would not share the needles.	○	○	○	○	○
15. I intend to share HIV facts with my friends.	○	○	○	○	○

Sexual Risk Survey

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Risky sexual behavior among college students is a significant problem that warrants scientific investigation. Other measures of sexual risk taking either are too narrowly focused to be used with college students or do not have adequate psychometric properties. The Sexual Risk Survey (SRS; Turchik & Garske, 2009) was developed to provide a broad and psychometrically sound measure of sexual risk taking to researchers interested in studying college students.

Development

The SRS was developed to assess the frequency of sexual risk behaviors in the past 6 months among college students. The SRS was developed at a midsized midwestern university in the United States with a sample of 613 male and female undergraduate students (Turchik & Garske, 2009). The initial survey was composed of 37 items taken from

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past surveys of sexual risk behaviors and from suggestions in the literature. Descriptive analyses and a principal components analysis with varimax rotation were used to reduce data from the original 37 SRS items. Items were eliminated based on low number of responses above 0 (< 10%), low item-total correlations (< .40), low communalities (< .40), and low factor loadings (< .40). Fourteen items were eliminated based on these criteria; the final survey contains 23 items. Please use Turchik and Garske (2009) as reference for the scale.

Response Mode and Timing

Participants are asked to read the 23 items, each describing a sexual risk behavior, and to indicate in a free-response format the number of times they engaged in each behavior over the past 6 months. The SRS was developed as a paper-and-pencil self-administered survey that can be given in groups, but can also be computer administered. Given the nature of the information, privacy is important for survey administration. The survey typically takes participants 5 to 10 minutes to complete. The SRS has also been given in an individual-structured interview format, and the responses to the paper-and-pencil survey and the interview were found to be highly correlated (r = .90).

Scoring

The Sexual Risk Survey raw scores are typically heavily positively skewed and need to be recoded before subscale or total scale scores can be obtained. These can be done using the original recoding method (Turchik & Garske, 2009) or using the more recent standardized recoding method (Turchik, Walsh, & Marcus, 2015). The standardized recoding method is important to ensure that results can be compared across samples and this method is recommended for use when participants are American university students.

Original Recoding Method

Given that sexual risk-taking scores are typically positively skewed, the data will likely need to be recoded or transformed to reduce skewness in the frequencies reported by the students. In the original study (Turchik & Garske, 2009), the responses to the 23 items were recoded into an ordinal series of categories to reduce the variability and skewness in the raw score totals. The raw numbers for each item were recoded into categories coded as 0 to 4. Codes of "0" only included frequencies of 0. Next, the remaining frequencies were examined for the sample and were treated as if they represented 100 percent of the frequencies. Because the data were negatively skewed, the following guideline was used to classify the frequencies greater than 0: 1 = 40 percent of responses, 2 = 30 percent of responses, 3 = 20 percent of responses, and 4 = 10 percent of responses. However, in practice, with the restricted variability of frequencies in many of the items, it was often not possible to classify the frequencies in this manner. Also, the distribution of frequencies will likely be different based on the sample, and researchers should not assume the ordinal categories used in one study would be valid in another sample. An alternative way to reduce skewness in the data is to perform some other normalizing technique, such as a logarithmic or inverse transformation, because the distribution will likely not be normally distributed. Researchers should refer to the original article for more discussion on this issue (Turchik & Garske, 2009).

Standardized Recoding Method

In 2015, data from 5,496 university students in 16 different American academic institutions in 11 states were used to develop a standardized scoring method based on the distribution of the item responses in the pooled sample (Turchik et al., 2015). After obtaining the raw item frequencies from participants, researchers can use the data in Table 2 from Turchik et al. (2015) to recode the raw data into ordinal categories for scoring.

Obtaining a Final Score

Once the items are recoded (using either of above methods) with scores from 0 to 4, all 23 items can be summed for the total sexual risk-taking score, with scores ranging from 0 to 92. The Sexual Risk Survey has five subscales, which were developed by exploratory principal component analyses in the original sample (Turchik & Garske, 2009) and the factor structure has been confirmed by confirmatory factor analyses (Turchik et al., 2015). The five subscales are: *Sexual Risk-Taking with Uncommitted Partners* (eight items), *Risky Sex Acts* (five items), *Impulsive Sexual Behaviors* (five items), *Intent to Engage in Risky Sexual Behaviors* (two items), and *Risky Anal Sex Acts* (three items). Based on findings that subscale scores are not always highly correlated and demographic differences across subscale scores (Turchik et al., 2015), researchers are recommended to focus on the more meaningful subscales scores rather than total scores on the Sexual Risk Survey.

Reliability

The SRS has demonstrated good internal consistency and test–retest reliability (Turchik & Garske, 2009). The internal consistency of the total Sexual Risk Survey with all 23 items was .88. For the five subscales, the Cronbach's alphas were .88, .80, .78, .89, and .61 for *Sexual Risk Taking with Uncommitted Partners, Risky Sex Acts, Impulsive Sexual Behaviors, Intent to Engage in Risky Sexual Behaviors*, and *Risky Anal Sex Acts*, respectively. Similar internal consistency numbers were found in a much larger pooled

American sample where the internal consistency of the total scale was .90, and the subscale scores ranged from .63 to .90 (Turchik et al., 2015). This study also presented reliability data by demographic factors, including age, gender, and ethnicity.

The 2-week test–retest reliability for the total Sexual Risk Survey was .93 (Turchik & Garske, 2009). The 2-week test–retest reliabilities for the *Sexual Risk-Taking with Uncommitted Partners, Risky Sex Acts, Impulsive Sexual Behaviors, Intent to Engage in Risky Sexual Behaviors*, and *Risky Anal Sex Acts* factors were .90, .89, .79, .70, and .58, respectively. The inclusion or exclusion of the *Risky Anal Sex Act* items did not affect the internal consistency or test–retest reliability of the total scale.

Validity

The SRS has demonstrated evidence of content, concurrent, and convergent validity (Turchik & Garske, 2009). Content validity was supported by inclusion of items based on a review of the literature, an examination of previous measures of sexual risk taking, and a pilot study of college students. The SRS demonstrated evidence of convergent and concurrent validity by its relationships with a number of other measures predicted to be related to sexual risk behaviors based on past literature. The SRS evidenced discriminant validity with low correlations with measures of social desirability and sexual threat of disclosure.

Other Information

The measure was originally given with a glossary of terms that might not be familiar to some participants and with a calendar of the last 6 months. Questions to help participants remember their sexual experiences over this time period were also included to help enhance accurate recall. It is recommended that researchers include a glossary for any terms in the measure that will likely be unfamiliar to their sample and include relevant slang terms in the glossary to help facilitate understanding.

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Exhibit

Sexual Risk Survey

Instructions: Please read the following statements and record the number that is true for you over the past six months for each question on the blank. If you do not know for sure how many times a behavior took place, try to estimate the number as close as you can. Thinking about the average number of times the behavior happened per week or per month might make it easier to estimate an accurate number, especially if the behavior happened fairly regularly. If you've had multiple partners, try to think about how long you were with each partner, the number of sexual encounters you had with each, and try to get an accurate estimate of the total number of each behavior. If the question does not apply to you or you have never engaged in the behavior in the question, put a "0" on the blank. Please do not leave items blank. *Remember that in the following questions "sex" includes oral, anal, and vaginal sex and that "sexual behavior" includes passionate kissing, making out, fondling, petting, oral-to-anal stimulation, and hand-to-genital stimulation.* Refer to the Glossary [omitted from this reproduction] for any words you are not sure about. Please consider only the last six months when answering and please be honest.

In the *past six months*:

1. ____ How many partners have you engaged in sexual behavior with but not had sex with?
2. ____ How many times have you left a social event with someone you just met?
3. ____ How many times have you "hooked up" but not had sex with someone you didn't know or didn't know well?
4. ____ How many times have you gone out to bars/parties/social events with the intent of "hooking up" and engaging in sexual behavior but not having sex with someone?
5. ____ How many times have you gone out to bars/parties/social events with the intent of "hooking up" and having sex with someone?
6. ____ How many times have you had an unexpected and unanticipated sexual experience?
7. ____ How many times have you had a sexual encounter you engaged in willingly but later regretted?

For the next set of questions, follow the same direction as before. However, for questions 8–23, if you have never had sex (oral, anal, or vaginal), please put a "0" on each blank.

8. ____ How many partners have you had sex with?
9. ____ How many times have you had vaginal intercourse without a latex or polyurethane condom? Note: Include times when you have used a lambskin or membrane condom.
10. ____ How many times have you had vaginal intercourse without protection against pregnancy?
11. ____ How many times have you given or received fellatio (oral sex on a man) without a condom?
12. ____ How many times have you given or received cunnilingus (oral sex on a woman) without a dental dam or "adequate protection" (please see definition of dental dam for what is considered adequate protection)?
13. ____ How many times have you had anal sex without a condom?
14. ____ How many times have you or your partner engaged in anal penetration by a hand ("fisting") or other object without a latex glove or condom followed by unprotected anal sex?
15. ____ How many times have you given or received analingus (oral stimulation of the anal region, "rimming") without a dental dam or "adequate protection" (please see definition of dental dam for what is considered adequate protection)?
16. ____ How many people have you had sex with that you know but are not involved in any sort of relationship with (i.e., "friends with benefits," "fuck buddies")?
17. ____ How many times have you had sex with someone you don't know well or just met?
18. ____ How many times have you or your partner used alcohol or drugs before or during sex?
19. ____ How many times have you had sex with a new partner before discussing sexual history, IV drug use, disease status and other current sexual partners?
20. ____ How many times (that you know of) have you had sex with someone who has had many sexual partners?
21. ____ How many partners (that you know of) have you had sex with who had been sexually active before you were with them but had not been tested for STIs/HIV?
22. ____ How many partners have you had sex with that you didn't trust?
23. ____ How many times (that you know of) have you had sex with someone who was also engaging in sex with others during the same time period?

STD Attitude Scale

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Researchers have found that attitudes are best described as multidimensional, having the three components of cognitive (belief), affective (feeling), and conative (intention to act). Beliefs express one's perceptions or concepts toward an attitudinal object; feelings are described as an expression of liking or disliking relative to an attitudinal object; and intention to act is an expression of what the individual says he/she would do in a given situation (Bagozzi, 1978; Kothandapani, 1971; Ostrom, 1969; Torabi & Veenker, 1986). Attitudes are one important component determining individual health-risk behavior. More attention is now given by health educators to improving or maintaining health-conducive attitudes. A scale designed specifically to measure the components of attitudes toward sexually transmitted diseases (STDs) can be valuable to educators and researchers in planning STD education and determining risk correlates of individuals.

Development

The STD Attitude Scale was developed to measure young adults' beliefs, feelings, and intentions to act regarding sexually transmitted diseases. The scale discriminates between individuals with high-risk attitudes toward STD acquisition and those with low-risk attitudes. A summated rating scale utilizing the 5-point Likert-type format and having three subscales reflecting the attitude components was constructed. Items were developed according to a table of specifications containing three conceptual areas: nature of STD, STD prevention, and STD treatment. Each subscale contained items from the three conceptual areas.

An extensive pool of items was generated from the literature, expert contribution, and via item solicitation from students. To avoid the possibility of a response set, both positive and negative items were developed. Attention

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was given to the readability of each item. From the item pool, three preliminary forms with 45 items each (15 items per subscale) were administered to 457 college students. Following statistical analysis, one scale containing the 45 items (15 per subscale) that best met item selection criteria of internal consistency and discrimination power was given to 100 high school students.

A further refined scale of 33 items (11 items per subscale), subjected to jury review, was given to 2,980 secondary school students. Analysis of these data produced the final scale of 27 items, nine items for each subscale. The final scale has items with highly significant levels of internal consistency (item score vs. subscales and total scale score) and discriminating power (upper group vs. lower group for each item).

Response Mode and Timing

Respondents indicate whether they *strongly agree, agree*, are *undecided, disagree*, or *strongly disagree* with each statement. The scale takes an average of 15 minutes to complete.

Scoring

Scoring is as follows: Total scale, Items 1–27; *Belief* subscale, Items 1–9; *Feeling* subscale, Items 10–18; and *Intention to Act* subscale, Items 19–27. Calculate scores for each subscale and total scale using the following point values. For Items 1, 10–14, 16, and 25: 5 (*strongly agree*), 4 (*agree*), 3 (*undecided*), 2 (*disagree*), and 1 (*strongly disagree*). For Items 2–9, 15, 17–24, 26, and 27: 1 (*strongly agree*), 2 (*agree*), 3 (*undecided*), 4 (*disagree*), and 5 (*strongly disagree*).

Higher subscale or total scale scores are interpreted as reflecting an attitude that predisposes one toward higher-risk STD behavior, and lower scores predispose the person toward lower-risk STD behavior.

Reliability

Yarber, Torabi, and Veenker (1988) reported a test–retest reliability over a 5- to 7-day period to be the following: Total scale $r = .71$; *Belief* subscale $r = .50$; *Feeling* subscale $r = .57$; *Intention to Act* subscale $r = .63$. Cronbach's alphas were as follows: Total scale $r = .73$; *Belief* subscale $r = .53$; *Feeling* subscale $r = .48$; *Intention to Act* subscale $r = .71$.

Burazeri, Roshi, Tavanxhi, Rrumbullaku, and Dasho (2003) translated the scale into Albanian and pretested undergraduate medical students, resulting in a Cronbach's alpha of .71 and a test–retest reliability of .75. Thu, Ziersch, and Hart (2007) reported an alpha coefficient of .64 among women attending university in Vietnam. Pre- and post-intervention reliability was .79 and .87 among college men and women in fraternities and sororities in the U.S. (Goldsberry, Moore, MacMillan, & Butler, 2016).

Validity

Scale items have evidence of content and face validity as they were developed according to a table of specifications reflecting the behavioral aspects of STD and the content emphasis—preventive health behavior—of an STD education school curriculum (Yarber, 1985). Further, a panel of experts judged each item's merit. The scale was developed, in part, as one component of a project for assessing the efficacy of a Centers for Disease Control STD education program (Yarber, 1985). Evidence of construct validity is provided by the fact that secondary school students exposed to the STD curriculum, in contrast to students receiving no STD instruction, showed improvement in scores from pretest to posttest when assessed by the scale (Yarber, 1988).

Other Information

The scale development was supported in part by U.S. Public Health Service grant award #R30/CCR500638–01.

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Exhibit

STD Attitude Scale

Please read each statement carefully. STD means sexually transmitted diseases, once called venereal diseases. Record your reaction by indicating which response below best describes how much you agree or disagree with the idea.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. How one uses his/her sexuality has nothing to do with STD.	○	○	○	○	○
2. It is easy to use the prevention methods that reduce one's chances of getting an STD.	○	○	○	○	○
3. Responsible sex is one of the best ways of reducing the risk of STD.	○	○	○	○	○
4. Getting early medical care is the main key to preventing harmful effects of STD.	○	○	○	○	○
5. Choosing the right sex partner is important in reducing the risk of getting an STD.	○	○	○	○	○
6. A high rate of STD should be a concern for all people.	○	○	○	○	○
7. People with an STD have a duty to get their sex partners to medical care.	○	○	○	○	○
8. The best way to get a sex partner to STD treatment is to take him/her to the doctor with you.	○	○	○	○	○
9. Changing one's sex habits is necessary once the presence of an STD is known.	○	○	○	○	○
10. I would dislike having to follow the medical steps for treating an STD.	○	○	○	○	○
11. If I were sexually active, I would feel uneasy doing things before and after sex to prevent getting an STD.	○	○	○	○	○
12. If I were sexually active, it would be insulting if a sex partner suggested we use a condom to avoid STD.	○	○	○	○	○
13. I dislike talking about STD with my peers.	○	○	○	○	○
14. I would be uncertain about going to the doctor unless I was sure I really had an STD.	○	○	○	○	○
15. I would feel that I should take my sex partner with me to a clinic if I thought I had an STD.	○	○	○	○	○
16. It would be embarrassing to discuss STD with one's partner if one were sexually active.	○	○	○	○	○
17. If I were to have sex, the chance of getting an STD makes me uneasy about having sex with more than one person.	○	○	○	○	○
18. I like the idea of sexual abstinence (not having sex) as the best way of avoiding STD.	○	○	○	○	○
19. If I had an STD, I would cooperate with public health persons to find the sources of STD.	○	○	○	○	○
20. If I had an STD, I would avoid exposing others while I was being treated.	○	○	○	○	○
21. I would have regular STD checkups if I were having sex with more than one person.	○	○	○	○	○
22. I intend to look for STD signs before deciding to have sex with anyone.	○	○	○	○	○

23. I will limit my sex activity to just one partner because of the chances I might get an STD.	○	○	○	○	○
24. I will avoid sex contact anytime I think there is even a slight chance of getting an STD.	○	○	○	○	○
25. The chance of getting an STD would not stop me from having sex.	○	○	○	○	○
26. If I had a chance, I would support community efforts toward controlling STD.	○	○	○	○	○
27. I would be willing to work with others to make people aware of STD problems in my town.	○	○	○	○	○

18 Identity and Orientation

Gay Identity Questionnaire

Stephen Brady,[1] *Boston University School of Medicine*

The Gay Identity Questionnaire (GIQ) can be used by clinicians and researchers to identify gay men in the developmental stages of "coming out" proposed by Cass (1979) in the Homosexual Identity Formation (HIF) Model. These stages include Confusion, Comparison, Tolerance, Acceptance, Pride, and Synthesis.

The GIQ can easily be scored for the purpose of identifying the respondent's stage of HIF. Findings suggest that the GIQ is a reliable and valid measure that can be used by clinicians and researchers to examine the coming-out process. Two hundred twenty-five male respondents were administered the final version of the GIQ and a psychosocial/background questionnaire. Efforts were made to recruit a developmentally heterogeneous sample of men with same-sex thoughts, feelings, and/or behavior. The majority of the respondents (179) were young (*M* age = 28.8 years), non-Hispanic White men residing in southern California in 1983. All respondents indicated they had homosexual thoughts, feelings, or engaged in homosexual behavior. In addition to the author's use, the instrument has been used in a number of doctoral dissertations and Master's theses.

Development

Test construction procedures included the selection of questionnaire items based upon the constructs of the HIF model, and the establishment of reliability and validity for the GIQ through two pilot tests and one final administration of the instrument (Brady, 1983; Brady & Busse, 1994).

Response Mode and Timing

The GIQ consists of 45 randomly ordered, true–false statements to which respondents respond by selecting either "*True*" or "*False*" depending upon whether they agree or disagree with the statement. The instrument takes approximately 15–20 minutes to complete.

Scoring

The scoring of the GIQ includes the following. Three items (Items 4, 22, and 40) are used as validity checks and identify that an individual has thoughts, feelings, or engages in behavior that can be labeled as homosexual. Respondents must mark at least one of these three items as *true* for the instrument to be considered appropriate for use in classifying the stage of homosexual identity formation.

The other 42 items are used to determine respondents' stage designation. Each of the six stages of HIF is represented by seven items that are characteristic of individuals at that stage. For each item a respondent marks as true, he accrues one point in the HIF stage represented by that item. For every item a respondent marks false, he receives a zero-point sub-score. The subset of items in which a respondent accrues the most points is his given stage designation. If a respondent accrues the same number of points in two or more stages, he is given a dual stage designation.

Stage 1 items: 6, 17, 20, 25, 28, 31, 37.

Stage 2 items: 1, 12, 21, 23, 24, 29, 32.

Stage 3 items: 11, 15, 16, 18, 27, 33, 42.

Stage 4 items: 2, 3, 7, 14, 35, 36, 44.

Stage 5 items: 5, 8, 9, 26, 34, 38, 41.

Stage 6 items: 10, 13, 19, 30, 39, 43, 45.

Reliability

Inter-item consistency scores for the GIQ were obtained using the Kuder–Richardson formula (Hays, 1973). Too few respondents were identified in the first two stages of HIF for data analytic procedures to be utilized. The reliabilities for the other four stages were: Stage 3 (Identity Tolerance), $r = .76$; Stage 4 (Identity Acceptance), $r = .71$; Stage 5 (Identity Pride), $r = .44$; Stage 6 (Identity Synthesis), $r = .78$.

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Validity

No statistically significant relationships were found between respondent age, education, income, religiosity, political values, and HIF stages. Findings that most demographic variables did not confound the HIF process supports the validity of the HIF model for predicting stages of coming out independent of those variables.

Findings also support a central construct of the HIF model which describes the importance of psychological factors in the evolution of a homosexual identity. Statistical tests revealed a significant positive relationship between respondent stage of HIF and a composite measure of nine self-report items assessing psychological well-being, $F(3, 189) = 8.67$, $p < .01$. Subsequent post-hoc analysis of ANOVA results using Tukey's HSD test (Hays, 1973) revealed that respondents in Stage 3, Identity Tolerance, reported having less psychological well-being compared to their counterparts in Stages 4, 5, and 6.

Significant relationships were also found between respondent's stage of HIF and five indices assessing homosexual adjustment. More specifically, respondents in Stage 3, Identity Tolerance, compared to respondents in the later stages of HIF, reported homosexuality as being a less viable identity, $F(3, 190) = 9.86$, $p < .01$; they were less exclusively homosexual, $F(3, 188) = 14.34$, $p < .01$; they were less likely to have "come out" to significant others, $F(3, 190) = 25.04$, $p < .01$; they were less sexually active, $F(3, 191) = 4.52$, $p < .01$); and they had fewer involvements in intimate homosexual relationships, χ^2 (3, $N = 194$), $= 9.68$, $p < .01$.

Respondents in the latter three stages of HIF did not differ appreciably from one another on measures of psychological well-being or homosexual adjustment. These latter findings suggest that homosexual identity formation may be a two-stage process rather than the six stages proposed by Cass (1979) in the HIF model. In the first stage (Identity Confusion/Comparison/Tolerance) respondents remain unclear about or do not like their homosexual identity, whereas in the second stage (Identity Acceptance/Pride/Synthesis) respondents know and approve of their identity while maintaining different public identities.

Findings support the use of the GIQ as a brief measure for identifying young middle-class White men at one of the stages of homosexual identity formation proposed by Cass (1979). In order to increase the generalizability of the instrument, future researchers should recruit a sample that includes women and people of color. In addition, a refinement of the instrument so that homosexual identity is treated as a continuous variable with a summed scale score, rather than a categorical variable with a stage designation, would be an improvement in the measurement of homosexual identity formation.

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Exhibit

Gay Identity Questionnaire

Please read each of the following statements carefully and then select whether you feel the statements are true or false for you at this point in time. A statement is selected as true if the entire statement is true, otherwise it is selected as false.

		True	False
1.	I probably am sexually attracted equally to men and women.	○	○
2.	I live a homosexual lifestyle at home, while at work/school I do not want others to know about my lifestyle.	○	○
3.	My homosexuality is a valid private identity, that I do not want made public.	○	○
4.	I have feelings I would label as homosexual.	○	○
5.	I have little desire to be around most heterosexuals.	○	○
6.	I doubt that I am homosexual, but still am confused about who I am sexually.	○	○
7.	I do not want most heterosexuals to know that I am definitely homosexual.	○	○
8.	I am very proud to be gay and make it known to everyone around me.	○	○
9.	I don't have much contact with heterosexuals and can't say that I miss it.	○	○
10.	I generally feel comfortable being the only gay person in a group of heterosexuals.	○	○
11.	I'm probably homosexual, even though I maintain a heterosexual image in both my personal and public life.	○	○
12.	I have disclosed to 1 or 2 people (very few) that I have homosexual feelings, although I'm not sure I'm homosexual.	○	○
13.	I am not as angry about treatment of gays because even though I've told everyone about my gayness, they have responded well.	○	○

14.	I am definitely homosexual but I do not share that knowledge with most people.	○	○
15.	I don't mind if homosexuals know that I have homosexual thoughts and feelings, but I don't want others to know.	○	○
16.	More than likely I'm homosexual, although I'm not positive about it yet.	○	○
17.	I don't act like most homosexuals do, so I doubt that I'm homosexual.	○	○
18.	I'm probably homosexual, but I'm not sure yet.	○	○
19.	I am openly gay and fully integrated into heterosexual society.	○	○
20.	I don't think that I'm homosexual.	○	○
21.	I don't feel as if I am heterosexual or homosexual.	○	○
22.	I have thoughts I would label as homosexual.	○	○
23.	I don't want people to know that I may be homosexual, although I'm not sure if I am homosexual or not.	○	○
24.	I may be homosexual and I am upset at the thought of it.	○	○
25.	The topic of homosexuality does not relate to me personally.	○	○
26.	I frequently confront people about their irrational, homophobic (fear of homosexuality) feelings.	○	○
27.	Getting in touch with homosexuals is something I feel I need to do, even though I'm not sure I want to.	○	○
28.	I have homosexual thoughts and feelings but I doubt that I'm homosexual.	○	○
29.	I dread having to deal with the fact that I may be homosexual.	○	○
30.	I am proud and open with everyone about being gay, but it isn't the major focus of my life.	○	○
31.	I probably am heterosexual or non-sexual.	○	○
32.	I am experimenting with my same sex, because I don't know what my sexual preference is.	○	○
33.	I feel accepted by homosexual friends and acquaintances, even though I'm not sure I'm homosexual.	○	○
34.	I frequently express to others, anger over heterosexuals' oppression of me and other gays.	○	○
35.	I have not told most of the people at work that I am definitely homosexual.	○	○
36.	I accept but would not say I am proud of the fact that I am definitely homosexual.	○	○
37.	I cannot imagine sharing my homosexual feelings with anyone.	○	○
38.	Most heterosexuals are not credible sources of help for me.	○	○
39.	I am openly gay around heterosexuals.	○	○
40.	I engage in sexual behavior I would label as homosexual.	○	○
41.	I am not about to stay hidden as gay for anyone.	○	○
42.	I tolerate rather than accept my homosexual thoughts and feelings.	○	○
43.	My heterosexual friends, family, and associates think of me as a person who happens to be gay, rather than as a gay person.	○	○
44.	Even though I am definitely homosexual, I have not told my family.	○	○
45.	I am openly gay with everyone, but it doesn't make me feel all that different from heterosexuals.	○	○

General Autogynephilia Scale

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The General Autogynephilia Scale (GAS; Hsu, Rosenthal, & Bailey, 2015) is a 22-item measure of natal males' sexual arousal by thoughts, fantasies, and behaviors related to being a woman. *Autogynephilia* is a natal male's propensity to be sexually aroused by the thought or image of being a woman (Blanchard, 1989a). Five types of autogynephilic interests have been identified: possessing female anatomy, interacting with other people as a woman, dressing in women's clothing, exhibiting female physiologic functions, and engaging in stereotypically feminine behavior.

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Blanchard (1989b, 1991) labeled these types of autogynephilia as *anatomic autogynephilia, interpersonal autogynephilia, transvestic autogynephilia, physiologic autogynephilia*, and *behavioral autogynephilia*, respectively.

Blanchard (1989b) developed the only two previous measures of autogynephilia: the Core Autogynephilia Scale and the Autogynephilic Interpersonal Fantasy Scale. The GAS was developed as a more comprehensive scale assessing all five known types of autogynephilia. Additionally, in Blanchard's original scales, the dichotomous scoring used for most items assigns the same value (1) to any endorsement of autogynephilia, whether it occurred only once or frequently. By giving full credit to a participant who has even once had the particular autogynephilic fantasy assessed by an item, this way of scoring items may inflate autogynephilia scores among controls, who might occasionally endorse an autogynephilia item without having autogynephilia. The GAS therefore uses a different, graded response scale.

Development

Twenty-two items were assembled to assess the five types of autogynephilia previously identified (Blanchard, 1989b, 1991): anatomic autogynephilia (Items 1–7), interpersonal autogynephilia (Items 8–11), transvestic autogynephilia (Items 12–14), physiologic autogynephilia (Items 15–18), and behavioral autogynephilia (Items 19–22). The seven items assessing anatomic autogynephilia were based on seven of Blanchard's (1989b) items from the Core Autogynephilia Scale. The remaining items assessing the other four types of autogynephilia were based on the authors' experience and research with autogynephilic individuals. Rather than dichotomous scoring of items, participants respond using a 5-point rating scale measuring degree of sexual arousal from 1 (*not at all arousing*) to 5 (*very arousing*) on the 22 items.

An exploratory factor analysis was conducted on the 22 assembled items in a sample of 149 autogynephilic males (Hsu et al., 2015). Results supported distinguishing five group factors, each reflecting one of the five types of autogynephilia. Specifically, the first factor contained Items 1 to 7 and reflected *Anatomic Autogynephilia*. The second factor consisted of Items 12 to 14 and 19, and reflected *Transvestic Autogynephilia*. The third factor consisted of Items 15, 16, and 18, and reflected *Physiologic Autogynephilia*. The fourth factor contained Items 8 to 11 and reflected *Interpersonal Autogynephilia*. Finally, the fifth factor consisted of Items 20 to 22 and 17, and reflected *Behavioral Autogynephilia*. The GAS was constructed with all 22 assembled items. Five subscales representing the five group factors were also constructed, each of which included the items that comprised the factor.

Results from a hierarchical factor analysis suggested that the five group factors were strongly underlain by a general factor of autogynephilia (Hsu et al., 2015). Because the general factor accounted for a much greater amount (.67) of the total variance of the 22 items than did the group factors (.30), it appears that the types of autogynephilia are less important than the degree of it. However, the five types of autogynephilia remain conceptually useful because meaningful distinctions were found among them, including differential endorsement rates and ability to predict other variables.

Response Mode and Timing

Participants can complete the GAS online or on paper in a private setting. They will select their response to each item on the 5-point rating scale. The measure should take no longer than 2 minutes to complete.

Scoring

Scores on the GAS are calculated by taking the average of all 22 items. Scores on the five subscales of the GAS are calculated by taking the average of the constituent items. (The *Anatomic Autogynephilia* subscale contained Items 1 to 7, the *Transvestic Autogynephilia* subscale contained Items 12 to 14 and 19, the *Physiologic Autogynephilia* subscale contained Items 15, 16, and 18, the *Interpersonal Autogynephilia* subscale contained Items 8 to 11, and the *Behavioral Autogynephilia* subscale contained Items 20 to 22 and 17.) Thus, the range of scores on the GAS and its five subscales is 1–5, where higher scores indicate a greater degree of general autogynephilia or of one type of autogynephilia.

Reliability

In their sample of autogynephilic males, Hsu et al. (2015) reported an internal consistency estimate of .93 for the GAS. Internal consistency estimates for the five subscales of the GAS ranged from .78 to .94.

Validity

Construct validity of the GAS and its five subscales was established by comparing scores between autogynephilic males and heterosexual male controls (Hsu et al., 2015). On average, autogynephilic males scored significantly higher on the GAS than did heterosexual males without autogynephilia, $d = 3.33$. On average, autogynephilic males also scored significantly higher on each of the five subscales, with effect sizes ranging from $d = 1.62$ to 3.43. In a multiple logistic regression, the GAS was significantly associated with participants' being a member of the autogynephilic rather than the control sample, controlling for the Core Autogynephilia Scale.

With respect to convergent validity, the GAS and its five subscales were significantly but moderately correlated with the Core Autogynephilia Scale among autogynephilic males (Hsu et al., 2015). Also including the heterosexual male controls, the GAS and its five subscales were significantly and strongly correlated with the Core Autogynephilia Scale. This suggests that the GAS and its subscales are

most related to the Core Autogynephilia Scale when simply assessing whether a male has autogynephilia or not. They are less related when assessing the degree of autogynephilia among individuals who have it.

Concurrent validity of individual subscales of the GAS was tested using multiple regression analyses (Hsu et al., 2015). On the one hand, several findings were consistent with the previous literature. For instance, *Interpersonal Autogynephilia* was positively associated with number of lifetime male sexual partners and non-heterosexual identity among autogynephilic males, controlling for the other subscales. This finding was consistent with Blanchard's (1989b) suggestion that sex with men among autogynephilic males is motivated by a desire to have sex with men as a woman, rather than genuine attraction to male bodies. On the other hand, several other findings were unexpected and difficult to explain. In particular, *Anatomic Autogynephilia* was negatively associated with gender dysphoria, controlling for the other subscales. This finding is contrary to previous research (e.g., Blanchard, 1993). Future studies should attempt to replicate some of the analyses related to validity (especially of the subscales) using different samples of autogynephilic individuals.

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Exhibit

General Autogynephilia Scale

How sexually arousing would you find each of the following activities?

	1 Not at all arousing	2 A little arousing	3 Moderately arousing	4 Quite arousing	5 Very arousing
1. The thought of being a woman.	○	○	○	○	○
2. Picturing myself having a nude female body or certain features of the nude female form.	○	○	○	○	○
3. Picturing myself with a woman's breasts.	○	○	○	○	○
4. Picturing myself with a woman's buttocks.	○	○	○	○	○
5. Picturing myself with a woman's legs.	○	○	○	○	○
6. Picturing myself with a vagina/vulva.	○	○	○	○	○
7. Picturing myself with a woman's face.	○	○	○	○	○
8. Picturing myself as a woman being admired by another person.	○	○	○	○	○
9. Having a stranger mistake me for a woman.	○	○	○	○	○
10. Picturing myself as a woman having sex with a man.	○	○	○	○	○
11. Having a man take me out for a romantic evening.	○	○	○	○	○
12. Picturing myself wearing women's underwear, sleepwear, or foundation garments (for example, a corset).	○	○	○	○	○
13. Picturing myself with polished nails, makeup, and lady's perfume.	○	○	○	○	○
14. Picturing myself wearing a beautiful dress and high-heeled shoes.	○	○	○	○	○
15. Picturing myself lactating and/or breastfeeding.	○	○	○	○	○
16. Picturing myself menstruating and using tampons.	○	○	○	○	○
17. Picturing myself urinating while seated like a woman.	○	○	○	○	○
18. Picturing myself being pregnant.	○	○	○	○	○
19. Picturing myself getting my hair done at a lady's salon.	○	○	○	○	○
20. Going to the women's bathroom or locker room in public.	○	○	○	○	○
21. Sitting in a feminine way.	○	○	○	○	○
22. Speaking with a high-pitched, clear female voice.	○	○	○	○	○

Measure of Sexual Identity Exploration and Commitment

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Identity encompasses a coherent sense of one's values, beliefs, and roles, including but not limited to gender, race, ethnicity, social class, spirituality, and sexuality. Identity development is an active process of exploring and assessing one's identity and establishing a commitment to an integrated identity. Marcia (1966) generated a four-status model for understanding ego identity development based on the processes of exploration and commitment to identity: (a) *foreclosure* (commitment without prior exploration), (b) *moratorium* (withholding commitment during the process of exploration), (c) *achievement* (commitment following exploration), and (d) *diffusion* (a lack of commitment and exploration).

Fassinger and colleagues described two models of gay and lesbian identity development that define sexual identity development as including four phases (awareness, exploration, deepening/commitment, and internalization/synthesis) conceptualized along the dimensions of individual and group membership identity (Fassinger & Miller, 1996; McCarn & Fassinger, 1996). Building upon the work of Fassinger and colleagues, Worthington, Savoy, Dillon, and Vernaglia (2002) conceptualized a developmental model of sexual identity that more broadly establishes sexual orientation identity as just one of six components of individual sexual identity (i.e., perceived sexual needs, preferred sexual activities, preferred characteristics of sexual partners, sexual values, recognition and identification of sexual orientation, and preferred modes of sexual expression).

The Measure of Sexual Identity Exploration and Commitment (MoSIEC) is a theoretically based multidimensional measure of the processes of sexual identity development. The purposes of this measure are to (a) quantitatively assess the processes associated with Marcia's (1966) model of identity development as applied to the construct of sexual identity and (b) assess the processes of sexual identity development among individuals of any sexual orientation identity. The MoSIEC is composed of four interrelated, but independent, dimensions underlying the construct of sexual identity, namely (a) *Commitment*, (b) *Exploration*, (c) *Sexual Orientation Identity Uncertainty*, and (d) *Synthesis/Integration*.

The MoSIEC is intended for persons of any sexual orientation identity The instrument is therefore not constrained for use in samples in which all participants are from LGB or heterosexual orientations, as is the case for earlier measures. In fact, the sexual orientation identities of participants need not be known at the time of administration in order to use the MoSIEC in psychological research, a feature unique to this instrument at the time of its development.

Development

The MoSIEC was developed and validated across four studies. In Study 1, scale development procedures and exploratory factor analysis were conducted. Additionally, initial reliability and validity estimates were examined (described below). Using Marcia's (1966) model of identity formation, Klein's (1993) extension of Kinsey and colleagues' (1948, 1953) model of sexual identity, and Worthington et al.'s (2002) model of heterosexual identity development, an initial pool of 48 MoSIEC items were generated. These items reflected exploration (i.e., past, current, and future) and commitment (i.e., not committed, committed, or synthesis/integration) across six dimensions of sexual identity: "(a) sexual needs, (b) sexual values, (c) characteristics of sexual partners, (d) preferred sexual activities, (e) sexual orientation identity, and (f) models of sexual expression" (Worthington, Navarro, Savoy, & Hampton, 2008, p. 24). A principal-axis factor analysis with oblique rotation was conducted with the initial 48 MoSIEC items. A four-factor solution with 22 items was retained.

In Study 2, confirmatory factor analyses were used to establish the factor reliability and construct validity of the MoSIEC retained in Study 1 across two samples. In Study 3, convergent validity and additional reliability data was examined. In Study 4, the authors assessed test–retest reliability.

Response Mode and Timing

Participants respond to each item using a 6-point Likert-type scale ranging from 1 (*very uncharacteristic of me*) to 6 (*very characteristic of me*). It typically takes a participant 10 minutes to complete the MoSIEC.

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Scoring

The MoSIEC consists of 22 items within four subscales: (a) *Commitment* (6 items; numbers 10, 11, 14, 16, 18, 20), (b) *Exploration* (8 items; numbers 2, 3, 5, 6, 8, 9, 12, 19), (c) *Sexual Orientation Identity Uncertainty* (3 items; numbers 1, 15, 21), and (d) *Synthesis/Integration* (5 items, numbers 4, 7, 13, 17, 22). The *Commitment* subscale assesses the degree of commitment to a sexual identity. The *Exploration* subscale measures "a general orientation toward or away from sexual exploration" (Worthington et al., 2008, p. 31). The *Sexual Orientation Identity Uncertainty* subscale assesses commitment or a lack of commitment to a sexual orientation identity. The Synthesis/Integration subscale measures the degree of commitment to a unified, cohesive sexual identity. On the *Commitment* subscale, 3 items are reverse scored (Items 15, 16, and 18); on the *Sexual Orientation Identity Uncertainty subscale*, 1 item is reverse scored (Item 1). Thus, higher scores on each of the subscales are indicative of higher levels of the construct being measured.

After reverse scoring the necessary items, MoSIEC subscale scores are obtained by averaging the ratings within each of the four subscales: (a) *Commitment*, (b) *Exploration*, (c) *Sexual Orientation Identity Uncertainty*, and (d) *Synthesis/Integration*. Subscale scores are obtained by averaging ratings on items receiving a response for each participant. Thus, if Item 17 is not rated by a specific respondent, only the remaining four items on the *Synthesis* subscale are used to obtain the average, and so on. This method ensures comparable scores when there are missing data.

Reliability

In past studies (Dillon, Worthington, Soth-McNett, & Schwartz, 2008; Worthington et al., 2008), findings have demonstrated the high internal consistency (Cronbach's $\alpha > .70$) of the MoSIEC subscales. Furthermore, test–retest reliability estimates are indicative of the MoSIEC subscales' stability across a 2-week interval (Worthington et al., 2008).

Validity

Exploratory and confirmatory factor analyses (Worthington et al., 2008) support the construct validity of the MoSIEC. Convergent validity was supported by "correlations indicating that the MoSIEC subscales were related to age, religiosity, sexual conservatism, and multiple aspects of sexual self-awareness in expected and logically consistent ways" (Worthington et al., 2008, p. 31). Criterion-related validity was established by demonstrated MoSIEC subscale differences across sexual orientation groups in expected and logically consistent ways. Dillon and colleagues (2008) provided further validity evidence for the *Exploration* and *Commitment* subscales in that these scores correlated or did not correlate with age, income, professional experience, sexual orientation, gender self-definition, gender self-acceptance, and lesbian, gay, bisexual (LGB) affirmative counseling self-efficacy as logically expected. Worthington and Reynolds (2009) found that all four of the subscales of the MoSIEC were useful for independently differentiating between research participants with different sexual orientation identities. Worthington, Dillon, and Becker-Schutte (2005) also found that heterosexual attitudes regarding LGB individuals were related to all four subscales of the MoSIEC, with the strongest correlations between sexual identity exploration and attitudes regarding LGB civil rights and "internalized affirmativeness" regarding homosexuality.

Additional Information

Dustin Hampton contributed to the original research on the scale.

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Exhibit

Measure of Sexual Identity Exploration and Commitment

Please read the following definitions before completing the survey items:

Sexual needs are defined as an internal, subjective experience of instinct, desire, appetite, biological necessity, impulses, interest, and/or libido with respect to sex.

Sexual values are defined as moral evaluations, judgments and/or standards about what is appropriate, acceptable, desirable, and innate sexual behavior.

Sexual activities are defined as any behavior that a person might engage in relating to or based on sexual attraction, sexual arousal, sexual gratification, or reproduction (e.g., fantasy to holding hands to kissing to sexual intercourse).

Modes of sexual expression are defined as any form of communication (verbal or nonverbal) or direct and indirect signals that a person might use to convey her or his sexuality (e.g., flirting, eye contact, touching, vocal quality, compliments, suggestive body movements or postures).

Sexual orientation is defined as an enduring emotional, romantic, sexual, or affectional attraction to other persons that ranges from exclusive heterosexuality to exclusive homosexuality and includes various forms of bisexuality.

	1 Very Uncharacteristic of Me	2	3	4	5	6 Very Characteristic of Me
1. My sexual orientation is clear to me.	○	○	○	○	○	○
2. I went through a period in my life when I was trying to determine my sexual needs.	○	○	○	○	○	○
3. I am actively trying to learn more about my own sexual needs.	○	○	○	○	○	○
4. My sexual values are consistent with all of the other aspects of my sexuality.	○	○	○	○	○	○
5. I am open to experiment with new types of sexual activities in the future.	○	○	○	○	○	○
6. I am actively trying new ways to express myself sexually.	○	○	○	○	○	○
7. My understanding of my sexual needs coincides with my overall sense of sexual self.	○	○	○	○	○	○
8. I went through a period in my life when I was trying different forms of sexual expression.	○	○	○	○	○	○
9. My sexual values will always be open to exploration.	○	○	○	○	○	○
10. I know what my preferences are for expressing myself sexually.	○	○	○	○	○	○
11. I have a clear sense of the types of sexual activities I prefer.	○	○	○	○	○	○

12. I am actively experimenting with sexual activities that are new to me.	○	○	○	○	○	○
13. The ways I express myself sexually are consistent with all of the other aspects of my sexuality.	○	○	○	○	○	○
14. I sometimes feel uncertain about my sexual orientation.	○	○	○	○	○	○
15. I do not know how to express myself sexually.	○	○	○	○	○	○
16. I have never clearly identified what my sexual values are.	○	○	○	○	○	○
17. The sexual activities I prefer are compatible with all of the other aspects of my sexuality.	○	○	○	○	○	○
18. I have never clearly identified what my sexual needs are.	○	○	○	○	○	○
19. I can see myself trying new ways of expressing myself sexually in the future.	○	○	○	○	○	○
20. I have a firm sense of what my sexual needs are.	○	○	○	○	○	○
21. My sexual orientation is not clear to me.	○	○	○	○	○	○
22. My sexual orientation is compatible all of the other aspects of my sexuality.	○	○	○	○	○	○

Sexual Orientation Self-Concept Ambiguity Scale

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David W. Hancock, *University of Massachusetts Amherst*

The Sexual Orientation Self-concept Ambiguity (SSA; Talley & Stevens, 2017) scale was developed to assess a person's awareness that their sexual orientation self-concept is perceived as inconsistent, unreliable, or uncertain, or, alternatively, that there is ambiguity surrounding the primary facets of their sexual orientation (e.g., self-identification, attraction, behavior). The scale contains 10 items, rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) point Likert-type scale. Initial support for the validation of the SSA scale is promising and measurement invariance has been established for use with individuals of varying gender and sexual identities, including cisgender heterosexual individuals.

Development

The SSA scale was adapted from the general Self-concept Clarity (SCC) scale, developed by Campbell et al. (1996). Question stems from the original 12 items of the SCC scale were altered to assess a lack of sexual orientation self-concept clarity, specifically, rather than the question stems referring to general self-concept used by Campbell et al.

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(1996). An additional three questions were developed based on (a) relevant indicators of identity uncertainty in the extant literature, (b) perceived incongruence among aspects of one's sexual orientation self-concept, and (c) perceived discrepancies in the sexual orientation self-concept both within and across time. The initial 15-item SSA scale was administered to a calibration sample, which oversampled sexual minority women relative to exclusively heterosexual women at a ratio of 2 to 1.

Given that the initial scale from which the current measure was adapted was constructed and validated to capture a unidimensional construct, the SSA scale was validated as having a single-factor structure, suggesting a total scale score is appropriate (Talley & Stevens, 2017). Modification indices from a categorical confirmatory factor analysis (CCFA) were used to identify items for removal. Ultimately five items were removed in the calibration sample before the model demonstrated adequate fit (χ^2 (35) = 47.02, p = .08, RMSEA = .03, 95% CI [.00, .05], CFI = .999, TLI = .999), at which point the single-factor model accounted for over 70 percent of the variation in responding with very few correlated residuals (< 4%). The final 10-item SSA scale was validated on an independent sample of young adults. The single-factor CCFA model in the validation sample also showed excellent model fit (χ^2 (35) = 78.29, p < .001, RMSEA = .03, 95% CI [.02, .05], CFI = .999, TLI = .998).

Measurement invariance (scalar invariance) was supported (Talley & Stevens, 2017) on the basis of chronological age and sexual orientation identity in the calibration sample, as well as on the basis of gender in the validation sample, indicating that the SSA construct is measured equally well across persons from these various categories (Muthén & Muthén, 2017).

Response Mode and Timing

The SSA scale can be administered as a traditional paper-and-pencil measure or online. The scale contains 10 Likert-type items with a response scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Participants are provided with the following instructions prior to completing the SSA items:

> Your sexual orientation is defined by your self-identification (e.g., lesbian, gay, bisexual, heterosexual) as well as your sexual attraction, sexual fantasies, and sexual behavior. Please consider all of these aspects of your sexual orientation when responding to the questions below. Please rate the extent to which you agree or disagree with each of the following statements.

The scale can be completed within 3–5 minutes.

Scoring

Items may be averaged to create an index capturing an individual's level of sexual orientation self-concept ambiguity, with higher scores indicating greater levels of self-perceived ambiguity with regard to one's sexual orientation self-concept. No items are reverse-coded.

Reliability

The 10-item scale demonstrated excellent reliability in both the calibration (α = .95; n = 348) and validation (α = .95; n = 1,046) samples (Talley & Stevens, 2017).

Validity

Construct validity was assessed and supported by mean-level comparisons of SSA scores reported by *exclusively heterosexual* persons (who typically show concordance among facets of sexual orientation) to *bisexual* and *primarily heterosexual* persons (who typically report more fluidity among facets of sexual orientation). Bisexual and primarily heterosexual individuals showed significantly higher mean SSA scores, relative to exclusively heterosexual individuals, Welch F(4) = 13.01, p < .001, as expected (Talley & Stevens, 2017).

Evidence for convergent validity was established by comparing the SSA scale score to the *Identity Uncertainty* subscale score of the Lesbian, Gay, and Bisexual Identity Scale (LGBIS; Mohr & Kendra, 2011) and the *Identity Uncertainty* subscale score of the Measure of Sexual Identity Exploration and Commitment scale (MoSIEC; Worthington, Navarro, Savoy, & Hampton, 2008). As expected, the Spearman correlation between the SSA scale score and LGBIS subscale score was high (r_s = .81, N = 339). After dropping a reverse-scored item from the MoSIEC *Identity Uncertainty* subscale score due to inadequate reliability, the Spearman correlation between the SSA scale score and MoSIEC *Identity Uncertainty* subscale score was moderate (r_s = .64). Notably, the Spearman correlation between the SSA and Self Concept Clarity scale scores, from which the current measure was based, was low (r_s = −.39, N = 320), suggesting the SSA scale measures a unique construct. Finally, the SSA scale score, as opposed to the MoSIEC or LGBIS subscale scores, was shown to be a more robust predictor of substance use, depressive symptoms, and anxiety symptoms (Talley & Stevens, 2017), as well as suicidal ideation (Talley, Brown, Cukrowicz, & Bagge, 2016), providing initial evidence of incremental and predictive validity.

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Exhibit

Sexual Orientation Self-Concept Ambiguity Scale

Your sexual orientation is defined by your self-identification (e.g., lesbian/gay, bisexual, heterosexual) as well as your sexual attractions, sexual fantasies, and sexual behaviors. Please consider all of these aspects of your sexual orientation when responding to the questions below. Please rate the extent to which you agree or disagree with each of the following statements.

	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
1. On one day I might have one opinion of my sexual orientation and on another day I might have a different opinion.	○	○	○	○
2. I feel as though my sexual orientation is different depending on whom I am with.	○	○	○	○
3. My views of my sexual orientation change rapidly or unpredictably.	○	○	○	○
4. Sometimes I feel that my sexual orientation is not really what it appears to be.	○	○	○	○
5. When I think about my sexuality in the past, I'm not sure what my sexual orientation was really.	○	○	○	○
6. My beliefs and actions regarding my sexual orientation often seem contradictory.	○	○	○	○
7. If I were asked to describe my sexual orientation, my description might end up being different from one day to another day.	○	○	○	○
8. My beliefs about my sexual orientation often conflict with one another.	○	○	○	○
9. Even if I wanted to, I don't think I could tell someone what my sexual orientation is really like.	○	○	○	○
10. It is often hard for me to make up my mind about my sexual orientation because I don't really know.	○	○	○	○

Asexuality Identification Scale

Morag A. Yule,[5] *Toronto Sexuality Centre*
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Research on asexuality, generally defined as a lack of sexual attraction, has received increasing attention. Research has focused on conceptualizing and understanding asexuality (Brotto & Yule, 2017) and has included investigations into correlates of asexuality (Bogaert, 2004), biological markers of asexuality (Yule, Brotto, & Gorzalka, 2014), and asexual identity (Scherrer, 2008).

Most asexuality research to date has been of individuals who in some manner self-identify as asexual (e.g., Brotto, Knudson, Inskip, Rhodes, & Erskine, 2010). Due to limitations in recruiting sufficiently powered local samples, most researchers have recruited asexual participants through online communities, thus excluding individuals who lack sexual attraction but are not members of an online group. Asexual members of an online community may have different experiences and features from those who are not members (Hinderliter, 2009). Further, because the term *asexuality* is relatively recent, a person who lacks sexual attraction might select heterosexual, homosexual (gay or lesbian), bisexual, or pansexual, rather than "asexual"

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in response to a query about their sexual orientation, perhaps as a result of experiencing romantic attraction in these directions. Taken together, these methodological factors may result in a restricted sample of asexually identifying persons participating in research.

In order to understand the construct of asexuality, we must find ways to obtain representative samples that include participants who do not experience sexual attraction and who may not belong to an online asexual community or self-identify as asexual. The Asexuality Identification Scale (AIS; Yule, Brotto, & Gorzalka, 2015) was developed to provide a valid and reliable measure of asexuality, independent of whether the participant self-identifies as such.

Development

The AIS was developed in several stages. The authors first generated eight open-ended questions that might best discriminate asexual from sexual individuals. One hundred thirty-nine asexual and 70 sexual participants completed these items, and these were examined for prevalent themes. These themes were used to generate 111 multiple-choice items, which were then distributed to 165 asexual individuals and 752 sexual individuals. Exploratory maximum-likelihood factor analysis with direct oblimin rotation was conducted to determine which of these items should be retained. Overall, this analysis indicated that a one-factor solution was appropriate, and individual items were selected based on how well they contributed to the measure's reliability. This resulted in 37 items, which were then administered to 316 asexual and 926 sexual individuals. A second factor analysis revealed that, again, a one-factor solution was appropriate. Twelve items were retained based on their reliability, and these form the final AIS questionnaire. All psychometric analyses were performed on these 12 items.

Response Mode and Timing

Items are scored using a 5-point Likert-type scale with responses ranging from 1 to 5, with lower-scored responses more typical of sexual individuals, and higher-scored responses more typical of asexual people. Though all items are scored on a 5-point scale, response choices vary. See Exhibit for specific item responses. The resulting measure takes approximately five to ten minutes to complete.

Scoring

Total AIS scores are calculated by summing responses from all twelve questions. Higher scores indicate greater tendency to endorse traits that may indicate asexuality. A cut-off score of 40/60 has been proposed, as a score of 40/60 on the AIS was found to capture 93 percent of individuals who self-identified as asexual. That is, 93 percent of self-identified asexual participants scored at or above 40 on the AIS, while 95 percent of self-identified sexual participants scored below 40.

Reliability

Individual items were selected based on how well they contributed to the measure, and the retained items showed high reliability ($\alpha > .80$). Test–retest reliability has not yet been established, and this is the focus of future research.

Validity

The final version of the AIS displayed known-groups validity, in that it showed statistically significant differences in scores between participants who did and did not self-identify as asexual. To assess convergent validity, the AIS was compared with the Sexual Desire Inventory (SDI; Spector, Carey, & Steinberg, 1996). The SDI Solitary subscale was found to overlap only weakly ($r = -.19$), while the SDI Dyadic subscale had a moderate negative correlation ($r = -.57$), with total scores on the AIS. In order to approximate incremental validity, scores on the AIS were compared with scores on an existing measure of sexual orientation, the Klein Scale (Klein, Sepekoff, & Wolf, 1985), which was modified to include asexuality as a sexual orientation. The AIS correlated only weakly with the Klein scale, suggesting that incremental validity was upheld and demonstrating that the AIS can assess asexuality over and above an easily adapted existing measure. To establish discriminant validity, the AIS was compared to the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 1994) to ensure that the AIS was not an indicator of negative sexual experiences. The AIS was compared to the Big-Five Inventory (BFI; John, Donahue, & Kentle, 1991) and the Short-Form Inventory of Interpersonal Problems-Circumplex scales (IIP-SC; Soldz, Budman, Demby, & Merry, 1995) to ensure that the AIS identified asexuality over and above basic interpersonal and personality traits. Scores on the AIS were not related to the CTQ, the BFI, or the IIP-SC.

Overall, the AIS has been shown to be a useful tool for identifying asexuality, independent of a person's self-identification as asexual. The questionnaire was developed solely for research purposes to differentiate asexual from sexual persons, and not to provide any information about asexuality itself. The AIS is brief, easy to administer and score, and is sex and gender neutral. We hope that this will allow the recruitment of representative samples of individuals who lack sexual attraction, despite how they might identify.

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Exhibit

Asexuality Identification Scale

These questions ask about your experiences over your lifetime, rather than during a short period of time such as the past few weeks or months. Please answer the questions as honestly and as clearly as possible while keeping this mind. In answering these questions, keep in mind a definition of sex or sexual activity that may include intercourse/penetration, caressing, and/or foreplay.

	1 Completely True	2 Somewhat True	3 Neither True nor False	4 Somewhat False	5 Completely False
1. I experience sexual attraction towards other people.	○	○	○	○	○

	1 Completely False	2 Somewhat False	3 Neither True nor False	4 Somewhat True	5 Completely True
2. I lack interest in sexual activity.	○	○	○	○	○
3. I don't feel that I fit the conventional categories of sexual orientation such as heterosexual, homosexual, or bisexual.	○	○	○	○	○
4. The thought of sexual activity repulses me.	○	○	○	○	○

	1 Always	2 Often	3 Sometimes	4 Rarely	5 Never
5. I find myself experiencing sexual attraction towards another person.	○	○	○	○	○

	1 Completely False	2 Somewhat False	3 Neither True nor False	4 Somewhat True	5 Completely True
6. I am confused by how much interest and time other people put into sexual relationships.	○	○	○	○	○
7. The term "non-sexual" would be an accurate description of my sexuality.	○	○	○	○	○
8. I would be content if I never had sex again.	○	○	○	○	○
9. I would be relieved if I was told that I never had to engage in any sort of sexual activity again.	○	○	○	○	○
10. I go to great lengths to avoid situations where sex might be expected of me.	○	○	○	○	○
11. My ideal relationship would not involve sexual activity.	○	○	○	○	○
12. Sex has no place in my life.	○	○	○	○	○

19 Love and Relationships

Attitudes Toward Sexual Behaviours Scale

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It is important to have psychometrically sound measures of various types of sexual attitudes because sexual attitudes are related to sexual health and sexual behavior. There are few measures focused on attitudes toward specific sexual behaviors. In addition, existing sexual attitude measures do not include items that assess online sexual behaviors and/or the context in which sexual behaviors occur. The latter is particularly important because the likelihood of engaging in a specific behavior in a particular context is best predicted by attitudes toward that behavior in that context (Ajzen & Fishbein, 1977). The Attitudes Toward Sexual Behaviours Scale (ASBS; Blanc & Rojas, 2018) was developed to fill these gaps. The ASBS assesses the attitudes toward specific sexual behaviors in different contexts. The ASBS includes items referring to dyadic sexual behaviors with a steady and a casual partner, solitary sexual behaviors when a person has a partner and does not have a partner, and sexual behaviors with more than one person at the same time. Dyadic sexual behaviors included are caressing/touching, penile–vaginal sexual intercourse, partnered masturbation, oral sex, anal sex, sexting, and cybersex. Solitary sexual behaviors included are solitary masturbation and sexual fantasies. Sexual behaviors with more than one person at the same time included are threesomes and group sex. The ASBS also includes items referring to the use of erotic material, such as erotic magazines and books and erotic movies. The ASBS may be a useful tool to predict specific sexual behaviors in different contexts.

Development

The ASBS was initially developed in Spain (Blanc & Rojas, 2018). Twenty-four items were created and administered (in paper and pencil format) to a sample of 200 university students in different degree programs (141 women and 59 men), ranging in age from 18 to 30 years ($M = 20.95$, $SD = 2.26$) as well as (in computerized format) to a sample of 300 young adults (150 women and 150 men), ranging in age from 18 to 30 years ($M = 21.56$, $SD = 2.73$). Each item assesses attitudes toward a sexual behavior in a specific context. Two items reflecting kisses (with a steady and a causal partner) were removed because they showed a ceiling effect and the item-total correlation was low. In both samples, an exploratory factor analysis with the 22 final items found five related factors: *frequent dyadic sexual behaviors with a casual partner, frequent dyadic sexual behaviors with a steady partner, solitary sexual behaviors and erotic material, unconventional sexual behaviors* (anal sex, threesomes, and group sex) and *online sexual behaviors* (sexual behaviors that have emerged as a result of advances in technology). In the first sample ($N = 200$), total variance explained in the EFA was 60.64 percent, and in the second sample ($N = 300$) it was 61.12 percent. Tucker's congruence coefficients in the five factors showed that the factorial structure was similar in both samples. Because all the factors correlated and there was the possibility that the scale could be essentially one-dimensional, a second-order factor analysis was conducted with the five factor scores. The second-order factor analysis yielded a single factor in both samples.

Subsequently, we developed an English version of the ASBS and evaluated its psychometric properties in a sample of Canadian young people (Blanc, Byers, & Rojas, 2018). First, the equivalence of construct and cultural aspects of the items were studied to ensure that they had a similar meaning in both countries. Next, the original version of the ASBS was translated into English by bilingual experts and both the Spanish and translated versions were reviewed (by bilingual experts with knowledge of Spanish and Canadian culture) to ensure that they were equivalent. Finally, experts in psychology, sexology, and measurement

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analyzed the English version and we pilot tested it with Canadian young people. After the pilot study, the English version of the ASBS (ASBS-E) was administered online to a sample of 209 young people who were living in Canada. A confirmatory factor analysis (done with parcels) was characterized by the same five first-order factors and a single second-order factor as the Spanish version and it demonstrated that the ASBS-E has the same factorial structure as the ASBS, with a good model fit (SRMR = .052, TLI = .935, CFI = .954, RMSEA = .089). Thus, the ASBS and the ASBS-E can be used as a one-dimensional scale.

Response Mode and Timing

The scale can be administered using different formats: paper and pencil, computerized (Blanc & Rojas, 2018), and online (Blanc, Byers, & Rojas, 2018; Blanc, Ordóñez-Carrasco, Sayans-Jiménez, & Rojas, 2016; Blanc, Sayans-Jiménez, Ordóñez-Carrasco, & Rojas, 2018). The completion time is approximately 5 minutes. Although the ASBS was created with a 5-point response scale, ranging from 1 (*very negative*) to 5 (*very positive*), as the ASBS-E, it has also been used with a 3-point response scale: *negative, neither negative nor positive*, and *positive* (Blanc et al., 2016; Blanc, Sayans-Jiménez et al., 2018).

Scoring

Total scores can range from 22 to 110 in the ASBS with five response alternatives and from 22 to 66 in the ASBS with three alternatives. All items are summed to obtain the total score (no items are reverse scored) and all of them have the same weight in the scale. Higher scores indicate more positive attitudes toward sexual behaviors.

In addition, a model based on the Item Response Theory as the rating scale model (a polytomous Rasch model) can also be used to obtain total ASBS scores. This model permits a conjoint measurement (items and persons). Blanc and Rojas (2018) showed that the items referring to frequent dyadic sexual behaviors with a steady partner have the least weight in the scale and the items referring to unconventional and online sexual behaviors have the heaviest weight in the scale. Person and item logit scores in the ASBS can be calculated using Rasch-model computer programs such as the Winsteps program (Linacre, 2017). Higher logit scores indicate more positive attitudes toward sexual behaviors.

Reliability

In the original version (the ASBS), with samples of young people, the reliability estimates using Cronbach's alphas were .92 (N = 200) and .90 (N = 300) in the version with five response categories (Blanc & Rojas, 2018), and .90 (N = 632) in the version with three response categories (Blanc, Sayans-Jiménez et al., 2018). Reliability assessed using the split-half method with the Spearman–Brown formula, where the halves had homogeneous content (the first half contained Items 1, 2, 5, 6, 9, 12, 14, 15, 18, 20 and 21, and the second half contained Items 3, 4, 7, 8, 10, 11, 13, 16, 17, 19 and 22), was .96 and .95 in the version with five response categories, and .96 in the version with three. Test–retest reliability over an interval of two weeks with a sample of psychology students (N = 128) using the version with three response alternatives was .91 (Blanc et al., 2016).

In the English version (the ASBS-E) with the sample of Canadian people (129 women, 47 men and 4 identified with another gender) ranging in age from 18 to 30 years (M = 19.97, SD = 2.44), the reliability estimated by Cronbach's alpha was .93, the omega coefficient was .94, and the Spearman-Brown coefficient (with the same items as in the original version in both halves) was .96 (Blanc, Byers, & Rojas, 2018).

Validity

Evidence for the convergent validity of the ASBS was generated by demonstrating relationships with number of sexual behaviors, erotophobia-erotophilia, and sexual experience. Specifically, ASBS scores were positively correlated (r = .47) with the total number of sexual behaviors engaged in for the sample of Spanish university students. Moreover, in the sample of Spanish young adults, a cluster analysis with the total scores on the five factors found two attitude profiles toward sexual behaviors: people with a more positive attitude profile who had engaged in more sexual behaviors; and, people with a more negative attitude profile who had engaged in fewer sexual behaviors (Blanc & Rojas, 2018). The ASBS scores were positively related with erotophobia–erotophilia in psychology students (r = .74; Blanc et al., 2016) and in heterosexual young adult people (r = .65; Blanc, Sayans-Jiménez et al., 2018); and with sexual experience in heterosexual men (β = .468; R^2 = .219) and heterosexual women (β = .511; R^2 = .26; Blanc, Sayans-Jiménez et al., 2018).

Evidence for the convergent validity of the ASBS-E was obtained using sexual attitude and behaviors measures and religiosity measures (Blanc, Byers, & Rojas, 2018). The ASBS-E scores were positively correlated with the Sexual Opinion Survey (r = .75), the Sexual Action and Interest Scale (r = .69), the Sexual Permissiveness Subscale of the Brief Sexual Attitude Scale (r = .58), the number of sexual behaviors engaged in (r = .52), and reported frequency of pornography use (r = .53). The ASBS-E scores correlated negatively with frequency of religious attendance (r = –.32) and the importance of religion in daily lives (r = –.33). Evidence of discriminant validity was obtained by demonstrating that the ASBS-E was not significantly correlated with scores on a measure of social desirability (r = –.04; Blanc, Byers, & Rojas, 2018).

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Exhibit

Attitudes toward Sexual Behaviours Scale

People can engage in sexual behaviours by themselves or with different types of partners. Below you will find a list of sexual behaviours in different contexts. We are interested in your attitudes toward these behaviours, taking the context into account.

Please indicate how positively or negatively you feel about engaging in the following behaviours with a *casual partner*.

	1 Very Negative	2	3	4	5 Very Positive
1. Caressing/touching any intimate part of the body of a casual partner.	○	○	○	○	○
2. Penile–vaginal sexual intercourse with a casual partner.	○	○	○	○	○
3. Mutual masturbation with a casual partner.	○	○	○	○	○
4. Oral sex with a casual partner.	○	○	○	○	○
5. Anal sex with a casual partner.	○	○	○	○	○
6. Send pictures or messages via the internet or a cell phone with sexual content (sexting) to a casual partner.	○	○	○	○	○
7. Sex over the internet (cybersex) with a casual partner.	○	○	○	○	○

Please indicate how positively or negatively you feel about engaging in the following behaviours with a *steady partner*.

	1 Very Negative	2	3	4	5 Very Positive
8. Caressing/touching any intimate part of the body of a steady partner.	○	○	○	○	○
9. Penile–vaginal sexual intercourse with a steady partner.	○	○	○	○	○
10. Mutual masturbation with a steady partner.	○	○	○	○	○
11. Oral sex with a steady partner.	○	○	○	○	○
12. Anal sex with a steady partner.	○	○	○	○	○
13. Send pictures or messages via the internet or a cell phone with sexual content (sexting) to a steady partner.	○	○	○	○	○
14. Sex over the internet (cybersex) with a steady partner.	○	○	○	○	○

Please indicate how positively or negatively you feel about engaging in the following behaviours.

	1 Very Negative	2	3	4	5 Very Positive
15. Solitary masturbation (alone) when a person doesn't have a steady partner.	○	○	○	○	○
16. Solitary masturbation (alone) when a person has a steady partner.	○	○	○	○	○

17. Having sexual fantasies when a person doesn't have a steady partner.	○	○	○	○	○
18. Having sexual fantasies when a person has a steady partner.	○	○	○	○	○
19. Reading erotic magazines or books (with sexual content).	○	○	○	○	○
20. Watching erotic movies (for example, showing sexual activities).	○	○	○	○	○

Please indicate how positively or negatively you feel about engaging in the following behaviours with *more than one person* at the same time.

	1 Very Negative	2	3	4	5 Very Positive
21. Sexual activity with two other persons at the same time (threesome).	○	○	○	○	○
22. Sexual activity with a group of persons at the same time (orgy or group sex).	○	○	○	○	○

Sexual and Relationship Distress Scale

Rebecca N. Frost,[2] *Griffith University*
Caroline Donovan, *Griffith University*

The Sexual and Relationship Distress Scale (SaRDS; Frost & Donovan, 2018) is the first measure of its kind, assessing the distress and consequences experienced by individuals when there are sexual problems within their relationship. This measure provides information about the types and severity of distressing outcomes resulting from sexual difficulties and can be completed by either or both members of a couple. The SaRDS is unique in its ability to assess not only individual distress, but also the consequences of sexual difficulties at the relationship level. The 14 brief subscales and total score are applicable in both research and clinical settings.

Development

An item pool was generated following in-depth qualitative interviews with 13 couples aged 18–65 years, who were in long-term relationships and who were experiencing problems with sexual desire (Frost & Donovan, 2019). Transcripts were thematically analysed and a total of 73 items were created to represent each of the 29 original themes. The original items were completed by a large sample of participants using online survey methodology in order to determine the underlying factor structure (Frost & Donovan, 2018). An exploratory factor analysis was conducted with a sample of 714 individuals in relationships of 6 months duration or longer, which resulted in an initial 17-factor solution that did not meet the criteria of factor loadings greater than .4, cross-loadings lower than .4, and theoretical stability. After multiple rounds of iterations following these criteria, a 14-factor solution was determined, optimizing theoretical and mathematical sense, that was then pruned to include only items reaching a threshold of factor loadings > .6. The final solution included the following factors: *Anxiety, Conflict, Initiation, Guilt, Infidelity, Security, Predictability, Communication, Body Image, Physical Affection, Hopelessness, Normalness*, and *Relationship Quality*.

A sample of 667 individuals who were involved in relationships of 6 months duration or longer were used to conduct a confirmatory factor analysis on the remaining 30 items. The measure demonstrated adequate fit (CFI = .97, NFI = .95, RMSEA = .05). Initial measure invariance was examined, and the 30 items showed good fit across two groups when tested for men and women, indicating configural invariance, $\chi^2(628) = 1{,}248.48$, $p < .001$, CFI = .96, NFI = .93, RMSEA = .04.

Response Mode and Timing

This measure can be completed online or using paper and pencil in approximately five minutes. Participants report on the previous month and indicate their agreement with

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the items on a 7-point scale from 0 (*Not at all true of me*) to 6 (*Completely true of me*).

Scoring

No items are reverse scored. The summed items for each subscale provide information about the areas of individual or relationship functioning that are most impacted by sexual difficulties, with higher scores indicating greater distress. The total score is computed by adding the responses to all 30 items and can range from 0 to 180, with higher scores indicating greater distress. A higher score may indicate either a greater breadth of consequences, or more distress relating to each item. Therefore, the measure should always be examined at the item and subscale levels rather than using the total score alone. Table 1 provides useful scoring information such as the items, range, mean and standard deviation for each subscale.

Reliability

In a sample of 1,192 adults in long-term relationships, the Cronbach's alpha for the SaRDS was .95, indicating excellent internal reliability.

Validity

Convergent validity was assessed in the same sample of adults in long-term relationships ($N = 1{,}192$) with Pearson's correlation assessing the relationship between the total score on the SaRDS and the total scores on measures of sexual distress (Female Sexual Distress Scale—Revised, FSDS-R; DeRogatis, Clayton, Lewis-D'Agostino, Wunderlich, & Fu, 2008) and relationship functioning (Couples Satisfaction Index; CSI; Funk & Rogge, 2007). As anticipated, the SaRDS was highly correlated with the FSDS-R ($r = .82$) and slightly less correlated with the CSI ($r = -.69$). The 21-item Depression Anxiety and Stress Scale (DASS-21; Henry & Crawford, 2005) showed low correlation with our measure ($r = .37$), indicating that it is not just capturing general psychological distress (Frost & Donovan, 2018).

TABLE 1
Subscale and Total Score Items, Range, Internal Reliability, Means, and Standard Deviations

SaRDS subscale	Items	Range	α	*M*	*SD*
1. Anxiety	1, 2 ,3	0–18	.90	5.14	5.84
2. Conflict	4, 5, 6	0–18	.88	6.31	5.38
3. Initiation	7, 8	0–12	.93	4.02	4.18
4. Guilt	9, 10	0–12	.70	3.98	3.75
5. Infidelity	11, 12	0–12	.87	1.71	2.93
6. Security	13, 14	0–12	.91	3.26	4.01
7. Predictability	15, 16	0–12	.77	5.86	3.60
8. Communication	17, 18	0–12	.78	2.85	3.40
9. Body Image	19, 20	0–12	.96	3.98	4.24
10. Physical Affection	21, 22	0–12	.87	5.24	4.43
11. Hopelessness	23, 24	0–12	.87	5.36	4.28
12. Self-esteem	25, 26	0–12	.95	3.46	4.14
13. Normalness	27, 28	0–12	.81	3.69	3.91
14. Relationship Quality	29, 30	0–12	.90	3.52	4.00
Total score	1–30	0–180	.95	58.37	39.39

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Exhibit

Sexual and Relationship Distress Scale

This questionnaire will help us to better understand the consequences of difficulties you may be having with the sexual part of your relationship. Please rate how true the following statements are for you over the past month. Please note that the word sex means any sexual activity with your partner and not just intercourse.

	0 Not at all true	1 A little true	2 Somewhat true	3 Neither true or untrue	4 Mostly true	5 Almost completely true	6 Completely true
1. I worry about sex even when I am not with my partner.	○	○	○	○	○	○	○
2. I feel anxious when I think about our sexual relationship.	○	○	○	○	○	○	○

3. I am stressed about sex.	○	○	○	○	○	○	○
4. My partner and I get angry with each other.	○	○	○	○	○	○	○
5. My partner and I regularly argue.	○	○	○	○	○	○	○
6. My partner and I get annoyed with each other over little things.	○	○	○	○	○	○	○
7. I do not initiate sex with my partner anymore.	○	○	○	○	○	○	○
8. I rarely bother to approach my partner for sex.	○	○	○	○	○	○	○
9. I feel guilty because I cannot sexually satisfy my partner.	○	○	○	○	○	○	○
10. I feel guilty for letting my partner down.	○	○	○	○	○	○	○
11. I am worried that my partner has been unfaithful.	○	○	○	○	○	○	○
12. I am worried that my partner will be unfaithful.	○	○	○	○	○	○	○
13. I am worried that our relationship might end.	○	○	○	○	○	○	○
14. I am questioning the strength of our relationship.	○	○	○	○	○	○	○
15. Our sex is routine or predictable.	○	○	○	○	○	○	○
16. There is not much variety when we have sex.	○	○	○	○	○	○	○
17. My partner and I do not talk about sex.	○	○	○	○	○	○	○
18. I avoid talking about sex with my partner.	○	○	○	○	○	○	○
19. I feel undesirable to my partner.	○	○	○	○	○	○	○
20. I feel unattractive to my partner.	○	○	○	○	○	○	○
21. We don't hug and kiss as much as we used to.	○	○	○	○	○	○	○
22. We are not as physically affectionate as we used to be.	○	○	○	○	○	○	○
23. I wish more effort was made to fix our sexual problems.	○	○	○	○	○	○	○
24. I feel frustrated that I can't fix our sexual problems.	○	○	○	○	○	○	○
25. I have lower confidence because of our sexual problems.	○	○	○	○	○	○	○
26. I have lower self-esteem because of our sexual problems.	○	○	○	○	○	○	○
27. I worry there is something wrong with me sexually.	○	○	○	○	○	○	○
28. I do not feel normal when I compare myself sexually to others.	○	○	○	○	○	○	○
29. My relationship has become more like a friendship.	○	○	○	○	○	○	○
30. My partner and I feel more like flat mates or colleagues.	○	○	○	○	○	○	○

Attitudes Toward Polyamory Scale

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The 7-item Attitudes Toward Polyamory scale (ATP; Johnson, Giuliano, Herselman, & Hutzler, 2015) measures individual differences in people's attitudes toward the polyamorous relationship orientation.

Development

Three samples comprising a total of 430 adult participants from the United States, including two Mechanical Turk samples and one college-student sample, were used for the development and validation of the ATP scale (Johnson et al., 2015).

A pool of 8 initial items was inspired by popular misconceptions about polyamory (items about STI infection, infidelity, and polyamory's effect on children), the poly community's emphasis on honesty and direct communication, and beliefs about religious forms of polyamory. Also included were items addressing the ability to love multiple people at one time, the possibility of long-term success in polyamorous relationships, and opinions about legal rights for such relationships.

An exploratory factor analysis (Sample 1) of the 8-item ATP revealed a single factor (eigenvalue = 4.32) that accounted for 54.1 percent of the variance and factor loadings that ranged from .59 to .87. We chose to revise the scale slightly to make it shorter and more cohesive by removing two items that we felt assessed understanding of polyamory ("*Polyamorous relationships have more open communication than monogamous relationships*" and "*It is possible to be in love with multiple individuals at the same time*") rather than attitudes toward the relationship style. We also added an additional item: "*I would allow my child to spend time with a peer who had polyamorous parents.*" The exploratory factor analysis (Sample 2) on the revised, 7-item version of the scale yielded a single factor (eigenvalue = 3.83) that accounted for 54.8 percent of the variance, with factor loadings ranging from .64 to .84 (Johnson et al., 2015).

We used the data from Sample 3 to conduct a confirmatory factor analysis, which revealed that the unidimensional model of the 7-item ATP fit the data quite well ($\chi^2(14) = 38.10$, $p = .001$, $NFI = .847$, $CFI = .965$, and $GFI = .943$).

Response Mode and Timing

The ATP items are measured on a 7-point Likert scale with anchors at 1 (*Disagree Strongly*) and 7 (*Agree Strongly*). The scale can be completed online or in paper-and-pencil format in approximately 2–4 minutes.

Scoring

Scoring the ATP involves summing the scores for the 7 individual items after reverse-scoring Items 3, 5, and 7. Scores range from 7 to 49, with higher numbers indicating more favorable attitudes toward polyamory.

Reliability

The internal consistency of the ATP across all three samples (Cronbach's $\alpha = .88$, .86, and .87, respectively) was high. Participants in Sample 2 completed the ATP twice (mean number of days between completions = 20.34, $SD = 2.29$); scores at Time 1 and Time 2 were strongly positively correlated ($r(128) = .89$, $p < .001$) indicating that the ATP scale exhibits good temporal stability.

Validity

Correlational analyses from all three samples support the construct validity of the ATP (see table 2 in Johnson et al., 2015). To establish convergent validity, we correlated the ATP scale with measures that should be conceptually related to attitudes toward polyamory. As expected, favorable attitudes toward polyamory were negatively correlated with traditional views and values (e.g., political conservatism, religious fundamentalism, right-wing authoritarianism, and favorable attitudes toward monogamy), negatively correlated with levels of emotional jealousy, and positively related to thrill-seeking and sex-positive attitudes and behaviors (e.g., sensation seeking, sexual sensation seeking, sexual risk-taking, need for sex, erotophilia). Supporting the discriminant validity of the measure, ATP items were not significantly correlated with measures of social desirability or self-esteem.

Criterion-related validity was subsequently established by (a) correlational research indicating that participants' prior exposure to polyamory (i.e., familiarity with the concept or knowing someone polyamorous) predicted positive ATP scores and (b) experimental research demonstrating that providing participants with additional information about polyamory and/or asking them to consider the advantages and limitations of monogamy led to more favorable ATP scores (Hutzler, Giuliano, Herselman, & Johnson, 2015).

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Exhibit

Attitudes toward Polyamory Scale

The following statements are opinions about different types of relationships. Please indicate the degree to which you agree or disagree with each statement using the scale below.

	1 Disagree Strongly	2 Disagree Somewhat	3 Disagree Slightly	4 Neutral	5 Agree Slightly	6 Agree Somewhat	7 Agree Strongly
1. I think that committed relationships with more than two individuals should have the same legal rights as married couples.	○	○	○	○	○	○	○
2. Polyamorous relationships can be successful in the long term.	○	○	○	○	○	○	○
3. People use polyamorous relationships as a way to cheat on their partners without consequence.	○	○	○	○	○	○	○
4. I would allow my children to spend time with a peer who had polyamorous parents.	○	○	○	○	○	○	○
5. Polyamorous relationships spread STIs (sexually transmitted infections).	○	○	○	○	○	○	○
6. Religious forms of polyamory (such as polygamy) are acceptable.	○	○	○	○	○	○	○
7. Polyamory is harmful to children.	○	○	○	○	○	○	○

The Passionate Love Scale

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Many classifications and typologies of love exist in the literature, but the most common distinction is between passionate love and companionate love. Hatfield and Walster (1978) described passionate love as "a state of intense longing for union with another. Reciprocated love (union with the other) is associated with fulfillment and ecstasy; unrequited love (separation) is associated with emptiness, anxiety, or despair" (p. 9).

In 1986, Hatfield and Sprecher published the Passionate Love Scale (PLS) for the purpose of promoting more research on this intense type of love. Although a companion scale to measure companionate love was not developed by this team of researchers, other measures exist in the literature designed to assess this type of love (e.g., see Friendship-Based Love Scale by Grote & Frieze, 1994). Other ways to tap constructs similar to companionate love are the Storge love style of the Love Attitude Scale or by combining the Intimacy and Commitment dimensions of the Triangular Love Scale (Hendrick & Hendrick, 1989).

Development

The PLS scale was specifically designed to assess the cognitive, emotional, and behavioral components of passionate

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love. The *cognitive components* consist of Intrusive thinking; Preoccupation with the partner; Idealization of the other or of the relationship; and Desire to know the other and be known by him/her. *Emotional components* consist of Attraction to the partner, especially sexual attraction; Positive feelings when things go well; Negative feelings when things go awry; Longing for reciprocity—passionate lovers not only love but want to be loved in return; Desire for complete and permanent union; and Physiological (sexual) arousal. Finally, *behavioral components* consist of actions aimed at determining the other's feelings; Studying the other person; Service to the other; and Maintaining physical closeness.

The most common form of the PLS is a 15-item scale (Form A), but an alternative 15-item version (Form B) is also available. The two scales can be combined to form a 30-item scale. Although the scale was originally designed using North American young adults in pilot studies, the scale has subsequently been revised to be administered to children (Hatfield, Schmitz, Cornelius, & Rapson, 1988). The measure has been translated into many languages and used in several cultures all over the globe. Today, we have record of at least 30 different countries that have used the PLS in their studies.

Response Mode and Timing

Participants are presented with statements such as "I would feel deep despair if ____ left me" and are asked to indicate how true the statement is of them. Possible responses range from 1 (*not at all true*) to 9 *(definitely true*). The ____ in each statement refers to the partner. The scale takes only a few minutes to complete, although often it is embedded in a larger questionnaire with other measures.

Scoring

The total score of the scale can be represented either by the mean of the scores for the items or by the sum of the ratings. Higher scores indicate greater passionate love. An average score for young adults across the items is approximately 7.0, at least in Western societies (Feybesse, 2015). For a popular press article, Hatfield and Sprecher (2004) provided for readers the following rubric to interpret their summed scores across 15 items: 106–135 points = Wildly, recklessly, in love; 86–105 points = Passionate but less intense; 66–85 points = Occasional bursts of passion; 45–65 points = Tepid, infrequent passion; and 15–44 points = The thrill is gone.

Reliability

Hatfield and Sprecher (1986) reported a coefficient alpha of .91 for the 15-item version and .94 for the 30-item version. Others have also reported high levels of reliability for the scale (e.g., Feybesse, 2015; Sprecher & Regan, 1998). A meta-analysis indicated that the original version of the PLS was both reliable and valid across several different studies (Graham & Christiansen, 2009). The PLS appears to be primarily unidimensional, with one primary factor emerging from a principal components factoring.

Validity

The scale is uncontaminated by a social desirability bias, as indicated by a nonsignificant correlation between the PLS and their scores on the 1964 Crowne and Marlowe Social Desirability Scale (Hatfield & Sprecher, 1986). There is some evidence for the construct validity of the PLS. For example, it has been found to be associated positively with conceptually similar scales and measures (Aron & Henkemeyer, 1995; Hatfield & Sprecher, 1986; Hendrick & Hendrick, 1989; Sprecher & Regan, 1998).

Other Information

Researchers have used the PLS in exploring many different topics, including cross-cultural differences in passionate love (Hatfield, Rapson, & Martel, 2007; Landis & O'Shea, 2000), prototype approaches to love (Fehr, 2005), neural bases of passionate love (Aron, Fisher, Mashek, Strong, & Brown, 2005; Bartels & Zeki, 2004; Langeslag, Muris, & Franken, 2013), changes in passionate love over the family life cycle (Tucker & Aron, 1993), correlates of sexual desire (Beck, Bozman, & Qualtrough, 1991), the effects of emotionally focused couples therapy (James, 2007), degree of bonding with an abusive partner (Graham et al., 1995), and the effects of having married couples engage in novel activities (Aron, Norman, Aron, McKenna, & Heyman, 2000). The PLS is copyrighted by Hatfield and Sprecher (1986). Permission is given to all clinicians and researchers who wish to use the scale in their research (free of charge).

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Exhibit

Passionate Love Scale

Form A

We would like to know how you feel (or once felt) about the person you love, or have loved, most *passionately*. Some common terms for passionate love are romantic love, infatuation, love sickness, or obsessive love.

Please think of the person whom you love most passionately *right now*. If you are not in love, please think of the last person you loved. If you have never been in love, think of the person you came closest to caring for in that way.

Whom are you thinking of?

○ Someone I love right now.
○ Someone I once loved.
○ I have never been in love.

Try to describe the way you felt when your feelings were most intense. Answers range from (1) *Not at all true* to (9) *Definitely true*.

	1 Not at all true	2	3	4	5	6	7	8	9 Definitely true
1. I would feel despair if _____ left me.	○	○	○	○	○	○	○	○	○
2. Sometimes I feel I can't control my thoughts; they are obsessively on ___.	○	○	○	○	○	○	○	○	○
3. I feel happy when I am doing something to make _____ happy.	○	○	○	○	○	○	○	○	○
4. I would rather be with _____ than anyone else.	○	○	○	○	○	○	○	○	○
5. I'd get jealous if I thought _____ were falling in love with someone else.	○	○	○	○	○	○	○	○	○
6. I yearn to know all about _____.	○	○	○	○	○	○	○	○	○
7. I want _____ physically, emotionally, mentally.	○	○	○	○	○	○	○	○	○
8. I have an endless appetite for affection from _____.	○	○	○	○	○	○	○	○	○
9. For me, _____ is the perfect romantic partner.	○	○	○	○	○	○	○	○	○
10. I sense my body responding when _____ touches me.	○	○	○	○	○	○	○	○	○
11. _____ always seems to be on my mind.	○	○	○	○	○	○	○	○	○

12. I want _____ to know me—my thoughts, my fears, and my hopes.	○	○	○	○	○	○	○	○	○
13. I eagerly look for signs indicating _____'s desire for me.	○	○	○	○	○	○	○	○	○
14. I possess a powerful attraction for _____.	○	○	○	○	○	○	○	○	○
15. I get extremely depressed when things don't go right in my relationship with _____.	○	○	○	○	○	○	○	○	○

Form B

We would like to know how you feel (or once felt) about the person you love, or have loved, most *passionately*. Some common terms for passionate love are romantic love, infatuation, love sickness, or obsessive love.

Please think of the person whom you love most passionately *right now*. If you are not in love, please think of the last person you loved. If you have never been in love, think of the person you came closest to caring for in that way.

Whom are you thinking of?

○ Someone I love right now.
○ Someone I once loved.
○ I have never been in love.

Try to describe the way you felt when your feelings were most intense. Answers range from (1) *Not at all True* to (9) *Definitely True*

	1 Not at all true	2	3	4	5	6	7	8	9 Definitely true
1. Since I've been involved with _____, my emotions have been on a roller coaster.	○	○	○	○	○	○	○	○	○
2. Sometimes my body trembles with excitement at the sight of _____.	○	○	○	○	○	○	○	○	○
3. I take delight in studying the movements and angles of _____'s body.	○	○	○	○	○	○	○	○	○
4. No one else could love _____ like I do.	○	○	○	○	○	○	○	○	○
5. I will love _____ forever.	○	○	○	○	○	○	○	○	○
6. I melt when looking deeply into ____'s eyes.	○	○	○	○	○	○	○	○	○
7. _____ is the person who can make me feel happiest.	○	○	○	○	○	○	○	○	○
8. I feel tender toward _____.	○	○	○	○	○	○	○	○	○
9. If I were separated from ____ for a long time, I would feel intensely lonely.	○	○	○	○	○	○	○	○	○
10. I sometimes find it difficult to concentrate on work because thoughts of _____ occupy my mind.	○	○	○	○	○	○	○	○	○
11. Knowing that _____ cares about me makes me feel complete.	○	○	○	○	○	○	○	○	○
12. If _____ were going through a difficult time, I would put away my own concerns to help him/her out.	○	○	○	○	○	○	○	○	○
13. _____ can make me feel effervescent and bubbly.	○	○	○	○	○	○	○	○	○
14. In the presence of _____, I yearn to touch and be touched.	○	○	○	○	○	○	○	○	○
15. An existence without _____ would be dark and dismal.	○	○	○	○	○	○	○	○	○

Maternal and Partner Sex During Pregnancy Scales

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The 6-item Maternal Sex During Pregnancy (MSP) and 8-item Partner Sex during Pregnancy (PSP) scales assess the attitudes of pregnant women and their sexual partners toward having sex during pregnancy (Jawed-Wessel, Schick, Herbenick, Fortenberry, Cattelona, & Reece, 2016). For these scales, attitude is operationalized as a function of feelings, beliefs, experiences, and preferences related to sexual activity during pregnancy.

Development

The MSP and PSP scales were developed simultaneously and in two phases (Jawed-Wessel et al., 2016). In Phase 1, open-ended, cross-sectional surveys were used to elicit the preliminary language for the development of two scales. Any individual age 18 years or over was invited to participate regardless of the individual's pregnancy status/history. Knowing that Phase 2 data would be collected from participants with little to no experience with having sex during pregnancy due to the early nature of their pregnancy, it was decided that Phase 1 recruitment would primarily target participants with little to no experience with having sex during pregnancy as well. Particular effort was also made to include non-heterosexual-identifying individuals because the final scales are intended for use with both same-sex and opposite-sex pregnant couples. A total of 109 men and 140 women were asked to imagine that they/their sexual partner (real or imagined) were pregnant and to respond with their first thoughts after reading the question. Open-ended items included questions such as: "*What are the first three words that come to mind when you think about sex during pregnancy?*," and "*Are there certain sexual behaviors you would be more (less) likely to do during pregnancy?*" Also included were sentence completion items such as "*Sex during pregnancy is . . .*," "*Pregnancy makes sex more . . .*," and "*Pregnancy makes sex less . . .*" Content analysis and expert panel review was conducted of MSP and PSP items. After analysis, five items were removed from each of the two scales. These items were removed due to redundancy and expert opinion.

In Phase 2 the factor structure, internal consistency, construct validity (content and convergent), and predictive capacity of the MSP and PSP were assessed and redundant items removed. Women 8–12 weeks pregnant and their partners were invited to participate in an online survey to evaluate the reliability and validity of the two scales. After screening, 112 couples were eligible and completed all necessary items. The majority of the men and women who participated in Phase 2 were White, heterosexual, and married. The majority of the participants were also college graduates and employed full-time in paid work. Although participants were recruited as couples, psychometric analyses were conducted separately for men and women due to the preliminary nature of the scale and the likelihood of different maternal and partner versions of the final scale.

An exploratory factor analysis was performed using principal component extraction with initial communalities of 1.0. Eigenvalues over 1.0 and an examination of the scree plot were used to determine the number of factors, and a varimax rotation was applied to the resulting factor solution. All MSP items loaded onto one factor, with both the scree plot and eigenvalues indicating one factor that accounted for 64.58 percent of the variance. Factor loadings ranged from .74 to .85. An analysis of the scree plot and eigenvalues over 1.0 indicated that men's responses to the PSP items also loaded onto one factor, which accounted for 69.35 percent of the variance. Factor loadings ranged from .77 to .92, and eigenvalues for factors beyond the first accounted for only a minimal amount of variance. The final MSP scale was composed of six items and the PSP scale was composed of eight items.

Response Mode and Timing

The measures can be completed on a computer or using paper-and-pencil in under 2 minutes. Participants respond the extent to which they agree or disagree (*strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree*) with a 6-point Likert-type response scale to a set of questions related to their current experiences, thoughts and feelings about their sex life. For the purpose of these questions, sex refers to vaginal, anal, or oral sex.

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Scoring

Items on each scale are averaged to create an attitude score. Scores range from 1 to 6 with higher scores indicating more positive sexual attitude toward having sex during pregnancy. No items are reverse coded.

Reliability

Cronbach's alpha (at or above .80) and corrected item-total correlations (at or above .30) were used to assess adequate internal consistency (DeVellis, 2003). Based on the Phase 2 data from 112 couples, the 6-item MSP had a Cronbach's alpha of .89 and .91 for the 8-item PSP.

Validity

Construct Validity was established using content and convergent validity as well as expert review. A strong significant correlation was found between MSP and PSP scores ($r = .78$; $p < .001$), suggesting non-independence, therefore dyadic analysis was used to assess the capacity of the scales to predict between groups. The unconditional model revealed that 80.36 percent of the variability in attitude scores was at the between-dyad level. No significant gender difference was found between MSP and PSP scores, and couples were found to be equally similar ($x^2 = 22.78$, $p > .50$) . Attitude scores were positively associated with being told to refrain from sexual intercourse from a prenatal care provider (Yes = 1; No = 2; $b = 1.85$, $SE = .17$, $t(95) = 1.57$, $p < .001$) and previous miscarriages (Yes = 1; No= 2; $b = 1.78$, $SE = .15$, $t(111) = 3.12$, $p < .001$). Attitude scores were negatively associated with those obtaining prenatal care (Yes = 1, No = 2; $b = –1.95$, $SE = .14$, $t(104) = –13.76$, $p < .001$) and those experiencing complications with the pregnancy (Yes = 1, No = 2; $b = –99$, $SE = .19$, $t(111) = –5.20$, $p < .001$). In other words, those who were told to refrain from sexual intercourse, experienced previous miscarriage(s), were not receiving prenatal care, or experiencing complications with the pregnancy held more negative attitudes toward sex during pregnancy. Being placed on bed rest and whether the pregnancy was planned or not had no association with attitude scores; however, those who had been trying to conceive for four months or more had more negative attitudes toward having sex during pregnancy than those who had been trying for three months or less ($b = –.95$, $SE = .12$, $t(193) = –3.72$, $p < .001$). These results suggest strong predictive capacity of the MSP and PSP scales.

Both the MSP and PSP scales demonstrated adequate convergent validity when assessed in relation to the MAMA Sexual Attitudes subscale (Kumar, Robson, & Smith, 1984) and the MSQ Sexual Anxiety and Sexual Motivation subscales (Snell, Fisher, & Walters, 1993). Appropriate significant correlations were found between MSP/PSP scores and MAMA Sexual Attitudes subscale. Significant correlations were also found between MSP/PSP scores and sexual anxiety and sexual motivation.

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Exhibit

Maternal and Partner Sex during Pregnancy Scales

This set of questions is related to your *current* experiences, thoughts, and feelings about your sex life. For the purpose of these questions, sex refers to vaginal, anal, or oral sex. Please respond to what extent you agree or disagree with the following statements.

Maternal Sex during Pregnancy Items

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Somewhat Agree	5 Agree	6 Strongly Agree
1. The pregnancy has made sex awkward.	○	○	○	○	○	○
2. It is impossible to have an exciting sex life because of the pregnancy.	○	○	○	○	○	○
3. Having sex can cause a miscarriage.	○	○	○	○	○	○
4. I feel anxious about having sex because of the pregnancy.	○	○	○	○	○	○

5. I think it is difficult for my partner to find me sexually desirable because of the pregnancy.	○	○	○	○	○	○
6. There are several sex positions we can no longer use because of the pregnancy.	○	○	○	○	○	○

Paternal Sex during Pregnancy Items

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Somewhat Agree	5 Agree	6 Strongly Agree
1. During pregnancy, I would rather masturbate than have sex.	○	○	○	○	○	○
2. I have trouble being sexually aroused because of the pregnancy.	○	○	○	○	○	○
3. It is difficult for me to find my partner sexually desirable because of the pregnancy.	○	○	○	○	○	○
4. The pregnancy has made sex awkward.	○	○	○	○	○	○
5. It is impossible to have an exciting sex life because of the pregnancy.	○	○	○	○	○	○
6. Having sex can cause a miscarriage.	○	○	○	○	○	○
7. I feel anxious about having sex because of the pregnancy.	○	○	○	○	○	○
8. There are several sex positions we can no longer use because of the pregnancy.	○	○	○	○	○	○

Defining Emophilia Through the Emotional Promiscuity Scale

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Emotional promiscuity is the idea that individuals vary in how fast, easily, and often they fall in love. The concept of "emotional promiscuity" has been renamed to the term, "emophilia" to avoid the negative connotations that come with the term "promiscuity." Emophilia is measured using the Emotional Promiscuity Scale (EP; Jones, 2011a, 2011b), a 10-item Likert-type scale that assesses an individual's propensity for falling in love easily and often. Research on emophilia is growing, with research finding a unique profile when it comes to the five-factor model of personality and self-esteem (Jones, 2017), behavioral activation and inhibition (Jones & Curtis, 2017), and positive and moderate correlations with related variables such as anxious attachment and unrestricted sociosexuality (Jones, 2015). Further, emophilia is unique in predicting certain life outcomes such as number of previous relationships, marital engagements, and number of pregnancies from different partners (Jones, 2015). When synergistically combined with unrestricted sociosexuality in an interaction term, emophilia predicts high numbers of unprotected partners throughout the course of one's life, or even the past year (Jones & Paulhus, 2012). Further, some researchers have found that emophilia is related to relationship infidelity, both sexual and emotional forms (Pinto, 2016). A new book (Jones, in press), describing in detail the literature on emophilia, is under contract at Oxford University Press and set to be available in 2020. Thus, there are real physical, mental, relational, and sexual health concerns associated with emophilia.

Development

The items were developed and written in a way that identified prototypical statements associated with increased

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speed and frequency of falling in love. Such statements were designed to assess agreement with feeling excitement associated with falling in love, tendencies towards love, falling in love with multiple people, rapidly developed feelings of love, and frequent love interests. These items were intended to capture the phenomena that occur during the development of rapid romantic interest. I proposed a two-factor solution, primarily because theories, such as Sexual Strategies Theory (Buss & Schmitt, 1993), find that speed and frequency of attraction are correlated but unique and important aspects to consider. Both exploratory and confirmatory factor analyses have suggested that the EP Scale indeed has a correlated two-facet structure (5 items per facet), with these facets being defined as "easily" and "frequently" with respect to falling in love (Jones, 2011a). These facets have a strong correlation ($r > .60$), suggesting a common composite score is the best approach to assessment. For both of these factors, all items have a loading of .4 or greater, and the two factors account for more than 60 percent of the variance. Further evidence for unidimensionality of the EP Scale comes from the fact that all items load appropriately (e.g., .30 or greater) on a common factor using a First Unrotated Principle Components (FUPC) analysis. Finally, using this same sample (Jones, 2011a), the scale structure is similar across age groups. In fact, even Item 10, which asks participants how many times they have fallen in love (0, 1, 2, 3, 4, or more), loads > .5 regardless of age cohort.

In sum, the scale is appropriate for use for young to older adults (i.e., anyone ages 18 and over). Although the scale may be appropriate for younger populations (e.g., adolescents) it has yet to be validated on a sample of this population.

Response Mode and Timing

The EP scale can be administered both online and in paper-and-pencil formats. It uses a Likert-type rating scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) and has one item that involves the retrospective accounts of number of times having fallen in love. Given the sensitive nature of the questions, it is best to be administered anonymously and privately; at the very least, it should be confidential. Further, it takes less than a minute, and a short form is currently being developed to cut that time down further.

Scoring

Items 2 and 5 are reverse scored, such that lower scores indicate greater emophilia. Item 10 is also recalculated such that 0 times falling in love = 1, 1 time = 2, 2 times = 3, 3 times = 4, and 4 or more times = 5. The scale can be summed or averaged to create a composite score. When summed, the EP Scale has a minimum score of 10 (lowest possible score) to 50 (highest possible score). The distribution of the scores across a wide variety of samples tends to suggest that the scores fall along a fairly normal continuum.

Reliability

The ten items that compose the EP Scale have, across all samples, reached a minimum threshold of adequate internal consistency (e.g., $\alpha > .70$), and this score generally ranges from .78 to .82 (Jones, 2015, 2017; Jones & Curtis, 2017).

Validity

Using online crowdsourcing samples from Amazon's Mechanical Turk (MTurk) (see Buhrmester, Kwang & Gosling, 2011), the EP Scale has demonstrated excellent convergent and discriminant validity (Jones, 2015, 2017; Jones & Curtis, 2017). Note that all of these MTurk samples had roughly equal numbers of men and women. Anonymous surveys have demonstrated that the EP Scale correlates positively with anxious attachment and unrestricted sociosexuality, as it should, but these correlations (.30–.40) are not so high as to suggest redundancy (e.g., Jones, 2017; Jones & Curtis, 2017). Thus, emophilia is distinguishable from related constructs such as borderline personality, anxious attachment, and sociosexuality (Jones, 2017). Further, in an online MTurk sample of 261 adults the EP Scale does *not* have a significant correlation with related concepts, such as Romantic Beliefs (e.g., Sprecher & Metts, 1989), suggesting that EP is not simply believing in romantic notions or being a "hopeless romantic" (Jones, 2017). Further, in a separate sample of 240 MTurk adults, Jones and Curtis (2017) found that the EP Scale had a negative correlation with avoidant attachment. Thus, trusting others, embracing intimacy, and approaching romantic connections are key features of EP (Jones, 2017).

Emophilia also has a unique association with the approach motivations of reward and drive that are associated with hypersensitivity towards *behavioral activation*. In contrast, sociosexuality is uniquely associated with behavioral activation associated with fun. In contrast, anxious attachment is not associated with any form of behavioral activation, and is instead an inhibitory process (Jones & Curtis, 2017). Further, when examining key outcomes associated with emophilia, such as number of unprotected sexual partners (Jones & Paulhus, 2012) or infidelity (Jones, 2011a), anxious attachment is not a unique predictor (Jones & Paulhus, 2012).

Jones (2017) found that the EP Scale also has no significant correlation with any of the "Big Five" personality traits, and does not significantly correlate with self-esteem. Further, the EP Scale has demonstrated excellent predictive validity insofar as it predicts less time from meeting a partner to falling in love (Jones, 2011a). The EP scale is also a unique predictor of the overall number of romantic partners one has had throughout the lifespan, and is the only predictor of broken marital engagements (Jones, 2015). EP is also a strong predictor of infidelity, both sexual and (especially) emotional infidelity (Jones & Weiser, 2017; Pinto, 2016).

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Exhibit

Emotional Promiscuity Scale

Rate your agreement using the following guidelines

	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
1. I fall in love easily.	○	○	○	○	○
2. For me, romantic feelings take a long time to develop.	○	○	○	○	○
3. I feel romantic connections right away.	○	○	○	○	○
4. I love the feeling of falling in love.	○	○	○	○	○
5. I am not the type of person who falls in love.	○	○	○	○	○
6. I often feel romantic connections to more than one person at a time.	○	○	○	○	○
7. I have been in love with more than one person at the same time.	○	○	○	○	○
8. I fall in love frequently.	○	○	○	○	○
9. I tend to jump into relationships.	○	○	○	○	○

10. During your entire life, with how many people have you fallen in love?

- ○ None
- ○ One
- ○ 2
- ○ 3
- ○ 4 or more

Intentions Towards Infidelity Scale—Revised

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Although many individuals report that infidelity is something that just "happens" (e.g., Allen & Atkins, 2005) others will acknowledge that they possess ways of thinking or patterns of behavior that suggest that they have intentions towards infidelity (Jones, Olderbak, & Figueredo, 2011). The Intentions Towards Infidelity Scale (ITIS) is designed to capture these conscious intentions. In fact, Allen and Atkins (2005) note that "predisposition" is something to consider when examining stages of infidelity. Thus, infidelity intentions are important to consider in the realm of relationships. Since its first publication, the ITIS has been cited more than 20 times (as per scholar.google.com), and appears to be a useful instrument in the assessment of conscious infidelity intentions (Jackman, 2015).

Development

The ITIS was developed through a large pool of relationship and mating-related items on college aged students, although the scale is appropriate for anyone of dating age. The scale has a single common factor on which all items consistently load. The latest version, the ITIS—Revised (ITIS-R), removes unnecessary words from the items to make them clearer.

Response Mode and Timing

The ITIS-R is a self-report questionnaire with responses ranging from –3 (*not at all likely*) to +3 (*extremely likely*). The ITIS-R takes less than a minute to complete.

Scoring and Reliability

The ITIS-R consists of seven items. Once the third item is reverse scored, the items should then be averaged to create a single score.

Reliability

The Cronbach's alpha internal reliability is also consistently acceptable across new samples ranging from .74 (Brewer, Hunt, James, & Abell, 2015) to .83 (e.g., Brewer & Abell, 2015). To date, there is still no test–retest reliability information available on the scale.

Validity

In work exploring the potential predictors of infidelity intentions, Jackman (2015) collected a fairly large sample ($N > 500$) to explore correlates of intentions towards infidelity. Jackman used the Theory of Planned Behavior (Ajzen, 1991), which posits that individuals are likely to have higher intentions to act a certain way when they have positive attitudes towards the action, believe the action is possible, and perceive social norms that are accepting the action, as a framework for the study. Thus, Jackman (2015) made three key observations about infidelity intentions: (a) positive attitudes towards infidelity increased infidelity intentions, (b) beliefs that extra-pair mating was easy increased infidelity intentions, and (c) having a social network that approved (or at least, did not disapprove) of infidelity increased intentions. Further, Jackman (2015) found (similar to Brewer et al., 2015) that the ITIS did indeed predict previous infidelity. Interestingly, the ITIS also significantly predicted having been "cheated on" less, according to Jackman (2015).

The ITIS has continued to demonstrate good validity. Brewer et al. (2015) found that the ITIS had moderate to strong correlations with having previously engaged in infidelity and with suspiciousness surrounding a partner's infidelity. Further, Brewer and colleagues found that the ITIS correlated with callous-manipulative personality traits. For example, all three components of the Dark Triad of personality (Machiavellianism, narcissism, and psychopathy; Paulhus & Williams, 2002), had moderate to strong correlations with the ITIS and with infidelity. In a separate sample, Brewer and Abell (2015) found that the ITIS again had a high correlation with Machiavellianism and also predicted differential motives for seeking sexual contact. For example, among these motives, the ITIS correlated significantly and positively with goal-attainment, revenge, resource acquisition, mate guarding, and social status. However, the ITIS did not correlate with motivations such as emotions or love and commitment, as would be predicted (Brewer & Abell, 2015).

From an evolutionary perspective, the ITIS is associated with theoretical frameworks of increased short-term mating. For example, the ITIS should have a positive relationship with higher levels of mating effort (i.e., attempts to obtain new sexual partners and retain

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them long enough for reproductive purposes; Rowe, Vazsonyi, & Figueredo, 1997), unrestricted sociosexuality, and overall short-term thinking with respect to life patterns (Olderbak, Gladden, Wolf, & Figueredo, 2014). Indeed, the ITIS loads moderately and negatively on higher order factors of slow "Life History Strategy" (LHS; Olderbak & Figueredo, 2012; Olderbak et al., 2014; see also Patch & Figueredo, 2017). Further, Olderbak and colleagues (2014) found that the ITIS had a negative correlation with different self-report measures of a slow LHS.

One point to consider moving forward is that the ITIS predicts suspicion over a partner's infidelity (Brewer et al., 2015), mate-guarding (Brewer & Abell, 2015), and having been (knowingly) cheated on less (Jackman, 2015). Thus, such individuals, although they intend to be unfaithful, seem quite uncomfortable with their partner's infidelity.

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Exhibit

Intentions towards Infidelity Scale

Please indicate how likely or unlikely you would be to do the following things. Use the scale below to answer the following questions.

	–3 Not at All Likely	–2	–1	0	+1	+2	+3 Extremely Likely
1. How likely are you to be unfaithful to a partner if you knew you wouldn't get caught?	○	○	○	○	○	○	○
2. How likely would you be to lie to a partner about being unfaithful?	○	○	○	○	○	○	○
3. How likely would you be to tell a partner if you were unfaithful?	○	○	○	○	○	○	○
4. How likely do you think you would be to get away with being unfaithful to a partner?	○	○	○	○	○	○	○
5. How likely would you be to hide your relationship from an attractive person you just met?	○	○	○	○	○	○	○
6. How likely do you think you are to be unfaithful to future partners?	○	○	○	○	○	○	○
7. How likely do you think you are to be unfaithful to your present or future husband or wife?	○	○	○	○	○	○	○

Sexual Rejection Scale

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The Sexual Rejection Scale (SRS) is a 20-item measure which assesses the distinct behaviors people use to decline a partner's offer or request for sex. The scale consists of four types of sexual rejection behaviours: (1) *reassuring* (i.e., affirming love for one's partner), (2) *hostile* (i.e., criticizing or hurting one's partner), (3) *assertive* (i.e., communicating reasons for rejection directly), and (4) *deflecting* (i.e., attempting to avoid conflict and diverting attention away from the situation). We have used this measure to understand which specific sexual rejection behaviors are effective at buffering against drops in relationship and sexual satisfaction when romantic partners experience conflicting levels of sexual interest (Kim, Muise, Sakaluk, & Impett, 2018).

Development

A bottom-up, data-driven approach was used to identify sexual rejection behaviors using an online sample of individuals who were in romantic relationships and sexually active (N = 456). Exploratory factor analysis of this initial set of 44 items in a new sample (N = 414) revealed a four-factor solution and a final 20-item scale consisting of five items in each of the four subscales selected based on items that had strong factor loadings (> .5) and low cross-loadings (< .3).

A confirmatory factor analysis was conducted in a new sample of participants online (N = 411). The final 20-item four-factor scale had good model fit (CFI = .948, RMSEA = .049 $CI_{90\%}$ = [.042, .056], SRMR = .069). The measurement structure of the SRS was further confirmed in an online pre-registered study (N = 364; https://osf.io/3tq43).

Response Mode and Timing

The SRS takes 1–3 minutes to complete. Participants respond to a list of items after being asked to think about the ways in which they reject their partner for sex. The frequency for each of the 20 listed behaviors are rated on a 5-point scale (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *frequently*, and 5 = *very frequently*).

Scoring

The SRS could be used to assess sexual rejection behaviors in a number of relational contexts. However, it should be noted that the SRS items and factor structure were identified and finalized in samples of individuals in romantic relationships. In the process of evaluating the SRS, we consistently identified a subgroup of individuals who did not engage in any sexual rejection behaviors (i.e., "non-rejecters"), using latent class analysis (LCA; McCutcheon, 1987). We excluded these individuals from our analyses, as they biased factor correlations. Researchers may also be interested in identifying and excluding "non-rejecters" prior to scoring the measure by either: (1) using LCA (a more precise, but complicated approach); or (2) using two highly discriminating items from the SRS (a less precise, but more straightforward approach; see supplementary materials for implementing both approaches: https://osf.io/9m6ps).

To score the SRS, the mean is calculated for each subscale of the SRS. No items are reverse-scored. Items for each subscale are as follows:

Reassuring:	5, 11, 14, 17, 18
Hostile:	2, 7, 10, 15, 16
Assertive:	4, 6, 8, 19, 20
Deflecting:	1, 3, 9, 12, 13

Higher scores in each subscale indicate more frequent use of that type of sexual rejection behavior (see Table 1).

Reliability

Across several samples, our measure demonstrated adequate reliability, with Cronbach's alphas ranging from .72 to .90, with the exception of an alpha of .60 in one subscale in Study 4 (see Table 1).

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TABLE 1
Summary of Sexual Rejection Scale Descriptive Statistics Across Studies

Sample	Subscale	*M*	*SD*	Reliability (α)
Study 1 (*N* = 414; EFA individuals in relationships)	Reassuring	2.78	1.1	.86
Together on average for 6 years	Hostile	1.40	.62	.86
	Assertive	2.78	1.21	.82
	Deflecting	1.74	.80	.84
Study 2 (*N* = 411 CFA individuals in relationships)	Reassuring	3.19	1.06	.85
Together on average for 6 years	Hostile	1.60	.74	.86
	Assertive	2.94	1.08	.88
	Deflecting	1.81	.80	.83
Study 3 (*N* = 315 individuals in relationships)	Reassuring	3.51	.91	.79
Recruited online; in a relationship for 7 years on average	Hostile	1.64	.71	.83
	Assertive	3.35	.98	.85
	Deflecting	1.92	.83	.82
Study 4 (*N* = 422; 211 couples who were first-time parents)	Reassuring	3.14	.74	.72
Recruited online, together on average for 4 years	Hostile	2.40	.95	.88
	Assertive	2.98	.73	.60
	Deflecting	2.46	.96	.88
Study 5 (*N* = 191 individuals in relationships)	Reassuring	3.01	1.23	.88
Recruited online	Hostile	1.56	.78	.89
(Kim, Muise, Sakaluk, & Impett, 2018)	Assertive	2.85	1.26	.90
	Deflecting	1.76	.90	.88
Study 6 (*N* = 196; 98 long-term couples)	Reassuring	3.24	1.23	.81
Couples recruited online, had been in a relationship for at least 2 years; together on average for 7 years	Hostile	1.71	.80	.85
	Assertive	3.28	1.14	.90
(Kim, Muise, & Impett, 2018)	Deflecting.	1.90	.79	.81

Validity

The SRS subscales demonstrate convergent validity with constructs that are similar in nature. *Reassuring* behaviors correlate with sexual communal strength (see Muise & Impett, 2019), r = .43), *hostile* behaviors correlate with trait aggression (r = .39), *assertive* behaviors correlate with sexual assertiveness (r = .29), and *deflecting* behaviors correlate with attachment avoidance (r = .49). The SRS subscales are conceptually distinct from general measures of relationship conflict behaviors (e.g., Rusbult & Zembrodt, 1983), providing evidence for discriminant validity. The SRS is also invariant across gender, thereby indicating a four-factor structure is appropriate for both men and women, who interpret and respond to the SRS in a similar manner.

Summary

The SRS has been used to measure sexual rejection among individuals in relationships. Further, the measure has been applied to diverse samples in North America, but has not been examined cross-culturally, which is an important avenue for future research.

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Exhibit

Sexual Rejection Scale

In romantic relationships, there are many different ways people may reject their partner for sex. Please indicate how frequently you engage in the following behaviors when you reject your partner for sex.

	1 Never	2 Rarely	3 Sometimes	4 Frequently	5 Very Frequently
1. I lie in a position that's hard to snuggle with.	○	○	○	○	○
2. I criticize aspects of our relationship.	○	○	○	○	○
3. I pretend to sleep.	○	○	○	○	○
4. I am clear and direct about why I don't want to have sex.	○	○	○	○	○
5. I reassure my partner that I love them.	○	○	○	○	○
6. I tell my partner honestly the reason why I don't want to have sex.	○	○	○	○	○
7. I criticize the way my partner initiated sex.	○	○	○	○	○
8. I say "no" in a direct manner.	○	○	○	○	○
9. I physically turn away from my partner.	○	○	○	○	○
10. I give my partner the silent treatment.	○	○	○	○	○
11. I offer to make it up to my partner in the future.	○	○	○	○	○
12. I don't reciprocate my partner's affection.	○	○	○	○	○
13. I pretend not to notice that my partner is interested in sex.	○	○	○	○	○
14. I offer alternate forms of physical contact (kissing, hugging, snuggling, cuddling).	○	○	○	○	○
15. I display frustration towards my partner.	○	○	○	○	○
16. I am short or curt with my partner.	○	○	○	○	○
17. I try to talk with my partner instead.	○	○	○	○	○
18. I reassure my partner that I am attracted to them.	○	○	○	○	○
19. I am straightforward about why I'm rejecting my partner.	○	○	○	○	○
20. I am open about the reason, even if it hurts my partner's feelings.	○	○	○	○	○

Sexual Communal Strength Scale

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The six-item Sexual Communal Strength (SCS) scale (Muise, Impett, Kogan, & Desmarais, 2013) assesses a person's motivation to meet their partner's sexual needs, their willingness to incur personal costs to meet their partner's sexual needs, and how happy they feel when meeting their partner's sexual needs. This measure has been used to understand how couples maintain sexual desire and satisfaction over time (Muise et al., 2013; Muise & Impett, 2015), as well as how romantic partners sustain feelings of connection, even during times when their sexual desire is low (Day, Muise, Joel, & Impett, 2015).

Development

The items for the SCS scale were generated by adapting relevant items from a general measure of communal strength, which assesses a person's willingness to incur costs to meet a relationship partner's needs (Mills, Clark, Ford, & Johnson, 2004). The SCS scale was originally administered to a sample of long-term couples ($M_{Rel\ length}$ = 11 years; Muise et al., 2013). The measure has also been administered to additional samples of established couples (Day et al., 2015; Muise & Impett, 2015), as well as to a sample of new parent couples (Muise, Kim, Impett & Rosen, 2017), a sample of couples coping with a sexual dysfunction (Muise, Bergeron, Impett, Delisle, & Rosen, 2018; Muise, Bergeron, Impett, & Rosen, 2017), and a sample of individuals who are in consensually nonmonogamous (CNM) relationships (Muise, Laughton, Moors & Impett, in press). The measure asks people to report on a current romantic or sexual partner, therefore, participants must be in a relationship to complete the measure.

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In two studies (Muise et al., 2017, 2018), to assess daily fluctuations in SCS, we adapted three of the items from the original six-item SCS scale to measure daily SCS.

Response Mode and Timing

The measure is brief—it includes only six items—and each item is responded to on a 5-point Likert-type scale with scores ranging from 0 (*not at all*) to 4 (*extremely*). Participants read one sentence asking them to respond to the items about their current romantic partner.

Scoring

Items 2 and 4 are reverse-scored and then the mean is calculated for all items. Higher scores indicate higher levels of SCS. See Table 1 for means and standard deviations.

Reliability

Across diverse samples, our measure demonstrated adequate reliability, with Cronbach's alphas ranging from .70 to .88 (see Table 1).

Validity

Sexual communal strength is highly correlated with general communal strength ($r = .59$, $p < .001$; Muise et al., 2013), demonstrating convergent validity, but SCS uniquely predicts sexual and relationship outcomes above and beyond general communal strength (Muise et al., 2013). As evidence of construct validity, people higher in SCS are perceived by their partners as more responsive to their needs during sex (Muise & Impett, 2015), suggesting that a person's level of SCS is detected by their romantic partner. The predictive validity of the SCS measure is demonstrated in one study where people higher in SCS were more likely, over the course of a 21-day daily experience study, to engage in sex with their partner on days when their partner was interested in sex, but their own personal desire for sex was low (Day et al., 2015). Consistent with theories of communal relationships (Clark & Mills, 2012), people higher in SCS reported higher daily sexual desire, maintained higher desire over time, and had partners who reported being more satisfied and committed to the relationship.

Summary

Our measure has been administered to diverse samples in North America, but has not been examined cross-culturally, which is an important avenue for future research. We have demonstrated that SCS is associated with important sexual and relationship outcomes, but to

TABLE 1
Sexual Communal Strength Scale Descriptives across Studies

Sample	*M*	*SD*	Reliability (α)
Study 1 (*N* = 44 mixed sex couples) $M_{Rel\ length}$ = 11 years (Muise et al., 2013; Muise & Impett, 2015, Study 2)	2.97	.52	.77
Study 2 (*N* = 118 mixed sex couples) $M_{Rel\ length}$ = 5 years (Muise & Impett, 2015, Study 1) *Note*. Scale is 1 to 7	5.56	.94	.70
Study 3 (*N* = 371 individuals in relationships) Recruited online; $M_{Rel\ length}$ =6 years (Day et al., 2015, Study 2) *Note*. Scale is 1 to 7	5.37	1.03	.81
Study 4 (*N* = 101 cohabitating couples) $M_{Rel\ length}$ = 4.5 years (Day et al., 2015, Study 3)	2.72	.80	.86
Study 5 (*N* = 95 women coping with vulvodynia and their romantic partner) $M_{Rel\ length}$ = 3 years (Muise et al., 2017, 2018) *Note*. 3-item daily measure	2.39 (Women) 2.63 (Partners)	1.15 1.15	.83 .88
Study 6 (*N* = 185 individuals in relationships) (Muise et al., 2016)	3.01	.72	.80
Study 7 (*N* = 255 mixed-sex new parent couples) M_{Rel} length = 3 years (Muise et al., 2016)	2.45 (Women) 2.76 (Men)	.66 .79	.76 .83
Study 8 (*N* = 649 individuals in CNM relationships) (Muise, Laughton, Moors & Impett, in press) *Note*. Scale is 1 to 5	4.33 (Primary partner) 4.11 (Secondary partner)	74 78	.76 .78

Note: Scale ranges from 0 to 4 and includes all 6 items, unless otherwise noted.

date, we have not explored what predicts higher SCS or how SCS develops over time.

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Exhibit

Sexual Communal Strength Measure

Keeping *your romantic partner* in mind, answer the following questions. Please rate each item from 0 = *not at all* to 4 = *extremely*

	0 Not at all	1	2	3	4 Extremely
1. How far would you be willing to go to meet your partner's sexual needs?	○	○	○	○	○
2. How readily can you put the sexual needs of your partner out of your thoughts?	○	○	○	○	○
3. How high a priority for you is meeting the sexual needs of your partner?	○	○	○	○	○
4. How easily could you accept not meeting your partner's sexual needs?	○	○	○	○	○
5. How likely are you to sacrifice your own needs to meet the sexual needs of your partner?	○	○	○	○	○
6. How happy do you feel when satisfying your partner's sexual needs?	○	○	○	○	○

Multidimensional Sexual Approach Questionnaire

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The Multidimensional Sexual Approach Questionnaire (MSAQ; Snell, 1992) is a self-report questionnaire designed to assess several different ways in which people can approach their sexual relationships. Specifically, the MSAQ was developed to measure eight separate approaches to sexual relations (cf. Hughes & Snell, 1990).

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Development

A varimax factor analysis with an orthogonal rotation extracted eight factors that corresponded to the eight approaches measured by the MSAQ.

Response Mode

The MSAQ consists of 56 items to which subjects respond by indicating how much they agree or disagree with each statement on a 5-point Likert-type scale ranging from +2 to –2: +2 (*agree*), +1 (*slightly agree*), 0 (*neither agree nor disagree*), –1 (*slightly disagree*), –2 (*disagree*). A final question (Item 57) is used to assess the form of relationship (current, past, or imagined) the subject was referring to in responding to the statements.

Scoring

The MSAQ is composed of eight subscales: (1) a passionate, *romantic* approach (Items 1–7); (2) a *game-playing* approach (Items 8–14); (3) a *companionate*, friendship approach (Items 15–21); (4) a *practical*, logical, and shopping-list approach (Items 22–28); (5) a dependent, *possessive* approach (Items 29–35); (6) an *altruistic*, selfless, and all-giving approach (Items 36–42); (7) a *communal* approach to sex (i.e., a sensitive approach to sexual relations that emphasizes caring and concern for a partner's sexual needs and preferences; Items 43–49); and (8) an *exchange* approach (i.e., a quid pro quo approach to sex, in which a sexual partner keeps "tabs" on the sexual activities and favors that she or he does for a partner, expecting to be repaid in an exchange fashion at some time in the future of the relationship; Items 50–56).

In order to create subscale scores, the seven items on each subscale are summed. Subscale scores thus range from –14 to 14. Higher positive (vs. negative) scores correspond to the tendency to approach one's sexual relations in the manner described by each respective MSAQ subscale. There is no reverse coding required for scoring and the questionnaire does not facilitate the computation of an overall scale score.

Reliability

To examine the internal reliability of the subscales on the MSAQ, Cronbach's alpha coefficients were computed for men and women, separately and in combination (Snell, 1992). The results clearly indicated that the subscales on the MSAQ have high internal reliability among both males and females. Specifically, the Cronbach's alphas ranged from a low of .72 for males and .73 for females to a high of .92 and .85 for males and females respectively, with average alphas for males of .80 and .78 for females.

Recent studies which have used the MSAQ have replicated the strong internal consistency among the subscales originally reported by Snell (1992). For instance, in a study of male and female undergraduate students ($N = 190$) the game-playing approach ($\alpha = .71$), the possessive approach ($\alpha = .71$), the exchange approach ($\alpha = .80$), the communal approach ($\alpha = .79$), the romantic approach ($\alpha = .74$), and the companionate approach ($\alpha = .81$) subscales all demonstrated good internal consistency (the other two subscales were not used in this study; Szielasko, Symons, & Price, 2013). Another study reported Cronbach's alphas for the subscales ranging from .68 to .89 using a mixed-sex adult online convenience sample (Glowacka, Rosen, Vannier, & MacLellan, 2017).

Validity

In initial examinations of the scale's validity, Snell (1992) examined sex differences in the approaches to sex and sexual relationships. Snell (1992) found that men who took a friendly, companionate approach to their sexual relations were characterized by sexual possessiveness, selflessness, and sensitivity. Not surprisingly, it was also found that, among men, a game-playing sexual style was directly related to a logical, rational way of approaching their sexual relations. In contrast, women who approached sex as a game were less likely to engage in friendly, companionate sexual relations. Other results reported by Snell indicated that men reported higher scores than women on the measure of the altruistic sexual style. In contrast, women, relative to men, were more rejecting of an exchange approach to sex. Men's and women's scores on the remaining MSAQ subscales were quite similar; they endorsed a romantic, companionate, and communal approach to their sexual relations, while disavowing a game-playing sexual style.

Snell (1992) also examined the impact of sexual attitudes on the way that people approach their sexual relations (i.e., their sexual styles). As expected, sexually permissive attitudes were found to be positively associated with a game-playing approach to sex; people with sexually responsible attitudes toward contraceptives approached their sexual relations with a sensitive, caring sexual style; and a sexual attitude favoring idealized communal sex, as measured by the Sexual Attitudes Scale (Hendrick & Hendrick, 1987), was positively and strongly associated with all of the following MSAQ sexual styles: passionate, companionate, possessive, altruistic, and communal approaches to sex.

Recent research using the MSAQ has provided further evidence for the scale's validity. One study found that the altruistic ($r = .38$), romantic ($r = .16$), possessive ($r = .58$), and practical ($r = .09$) approach subscales were significantly associated with sexual contingent self-worth (Glowacka et al., 2017). The scale has also been used in the assessment of the validity of newly developed measures, including the Sexual Contingent Self-Worth Scale (Glowacka et al., 2017) and the Sexual Relationship Measure (Szielasko et al., 2013).

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Exhibit

Multidimensional Sexual Approach Questionnaire

Following are several statements that reflect different attitudes about sex. For each select the response that indicates how much you agree or disagree with that statement. Some of the items refer to a specific sexual relationship, while others refer to general attitudes and beliefs about sex. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never had a sexual relationship, answer in terms of what you think your responses would most likely be in a future sexual relationship.

	Strongly agree with the statement	Moderately agree with the statement	Neutral—Neither agree not disagree	Moderately disagree with the statement	Strongly disagree with the statement
1. I was sexually attracted to my partner immediately after we first met.	○	○	○	○	○
2. I feel a strong sexual "chemistry" toward my partner.	○	○	○	○	○
3. I have a very intense and satisfying sexual relationship with my partner.	○	○	○	○	○
4. I was sexually meant for my partner.	○	○	○	○	○
5. I became sexually involved rather quickly with my partner.	○	○	○	○	○
6. I have a strong sexual understanding of my partner.	○	○	○	○	○
7. My partner fits my notion of the ideal sexual partner.	○	○	○	○	○
8. I try to keep my partner a little uncertain about my sexual commitment to him/her.	○	○	○	○	○
9. I believe that what my partner doesn't know about my sexual activity won't hurt him/her.	○	○	○	○	○
10. I have not always told my partner about my previous sexual experiences.	○	○	○	○	○
11. I could end my sexual relationship with my partner rather easily and quickly.	○	○	○	○	○
12. My partner wouldn't like hearing about some of the sexual experiences I've had with others.	○	○	○	○	○
13. When my partner becomes too sexually involved with me, I want to back off a little.	○	○	○	○	○
14. I like playing around with a number of people, including my partner and others.	○	○	○	○	○
15. The sexual relationship between myself and my partner started off rather slowly.	○	○	○	○	○
16. I had to "care" for my partner before I could make love to him/her.	○	○	○	○	○

17.	I expect to always be a friend of my sexual partner.	○	○	○	○	○
18.	The sex I have with my partner is better because it was preceded by a long friendship.	○	○	○	○	○
19.	I was a friend of my sexual partner before we became lovers.	○	○	○	○	○
20.	The sex my partner and I have is based on a deep friendship, not something mystical and mysterious.	○	○	○	○	○
21.	Sex with my partner is highly satisfying because it developed out of a good friendship.	○	○	○	○	○
22.	Before I made love with my partner, I spent some time evaluating her/his career potential.	○	○	○	○	○
23.	I planned my life in a careful manner before I chose my sexual partner.	○	○	○	○	○
24.	One of the reasons I chose my sexual partner is because of our similar backgrounds.	○	○	○	○	○
25.	Before I made love with my sexual partner, I considered how s/he would reflect on my family.	○	○	○	○	○
26.	It was important to me that my sexual partner be a good parent.	○	○	○	○	○
27.	I thought about the implications for my career before I made love with my sexual partner.	○	○	○	○	○
28.	I didn't have sex with my partner until after I had considered our hereditary backgrounds.	○	○	○	○	○
29.	When sex with my partner isn't going right, I become upset.	○	○	○	○	○
30.	If my sexual relationship with my partner ended, I would become extremely despondent and depressed.	○	○	○	○	○
31.	Sometimes I am so sexually attracted to my partner that I simply can't sleep.	○	○	○	○	○
32.	When my partner sexually ignores me, I feel really sick.	○	○	○	○	○
33.	Since my partner and I started having sex, I have not been able to concentrate on anything else.	○	○	○	○	○
34.	If my partner became sexually involved with someone else, I wouldn't be able to take it.	○	○	○	○	○
35.	If my partner doesn't have sex with me for a while, I sometimes do stupid things to get her/his sexual attention.	○	○	○	○	○
36.	If my partner were having a sexual difficulty, I would definitely try to help as much as I could.	○	○	○	○	○
37.	I would rather have a sexual problem myself than let my partner suffer though one.	○	○	○	○	○

38. I could never be sexually satisfied unless first my partner was sexually satisfied.	○	○	○	○	○
39. I am usually willing to forsake my own sexual needs in order to let my partner achieve her/his own sexual needs.	○	○	○	○	○
40. My partner can use me the way s/he chooses in order for him/her to be sexually satisfied.	○	○	○	○	○
41. When my partner is sexually dissatisfied with me, I still accept him/her without reservations.	○	○	○	○	○
42. I would do practically any sexual activity that my partner wanted.	○	○	○	○	○
43. It would bother me if my sexual partner neglected my needs.	○	○	○	○	○
44. If I were to make love with a sexual partner, I'd take that person's needs and feelings into account.	○	○	○	○	○
45. If a sexual partner were to do something sensual for me, I'd try to do the same for him/her.	○	○	○	○	○
46. I expect a sexual partner to be responsive to my sexual needs and feelings.	○	○	○	○	○
47. I would be willing to go out of my way to satisfy my sexual partner.	○	○	○	○	○
48. If I were feeling sexually needy, I'd ask my sexual partner for help.	○	○	○	○	○
49. If a sexual partner were to ignore my sexual needs, I'd feel hurt.	○	○	○	○	○
50. I think people should feel obligated to repay an intimate partner for sexual favors.	○	○	○	○	○
51. I would feel somewhat exploited if an intimate partner failed to repay me for a sexual favor.	○	○	○	○	○
52. I would probably keep track of the times a sexual partner asked me for a sensual pleasure.	○	○	○	○	○
53. When a person receives sexual pleasures from another, s/he ought to repay that person right away.	○	○	○	○	○
54. It's best to make sure things are always kept "even" between two people in a sexual relationship.	○	○	○	○	○
55. I would do a special sexual favor for an intimate partner, only if that person did some special sexual favor for me.	○	○	○	○	○
56. If my sexual partner performed a sexual request for me, I would probably feel that I'd have to repay him/her later on.	○	○	○	○	○

57. I responded to the previous items based on:

- ○ A current sexual relationship
- ○ A past sexual relationship
- ○ An imagined sexual relationship

Sexual Relationship Scale

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Clark and Mills (1979) proposed a theory of relationship orientation based on the rules governing the giving and receiving of benefits. An *exchange-relationship orientation* was defined as one in which benefits are given on the assumption that a similar benefit would be reciprocated. The recipient of a benefit in such a relationship presumably incurs a debt to make a suitable, comparable return. By contrast, a *communal-relationship orientation* was defined by Clark and Mills (1979) as one in which benefits are given on the assumption that they are in response to some need. In communal relationships, concern for a partner's welfare mediates interpersonal giving rather than anticipation of a reciprocated benefit. Sexual relationships may also be viewed from a communal perspective, which emphasizes caring and concern for a partner's sexual needs and preferences, or from an exchange perspective, which emphasizes a quid pro quo approach to sexual relations.

Some individuals take a communal approach to their sexual relations in which they feel responsible for and involved in their partner's sexual satisfaction and welfare. In this sense, they contribute to their partner's sexual satisfaction and welfare to please the partner and to demonstrate a desire to respond to that person's sexual satisfaction. Moreover, people who take a communal approach to sexual relations also expect their partner to be responsive and sensitive to their own sexual welfare and needs. In contrast, those who approach sexual relations from an exchange orientation do not feel any special responsibility for their partner's sexual satisfaction and welfare. Rather, they give sexual pleasure only in response to sexual benefits they have received in the past or have been promised in the future. An exchange approach to sexual relations often involves sexual debts and obligations. The individuals involved in this type of sexual relationship are usually concerned with how many sexual favors they have given and received, and the comparability of these sexual exchanges. To examine these ideas, the Sexual Relationship Scale (SRS; Hughes & Snell, 1990) was developed to measure exchange and communal approaches to sexually intimate relations.

Development

The SRS (Hughes & Snell, 1990) is an objective self-report instrument that was designed to measure communal and exchange approaches to sexual relationships. More specifically, the SRS was developed to assess chronic dispositional differences in the type of orientation that people take toward their sexual relations.

The SRS was based on the Communal Orientation Scale developed by Clark, Ouellette, Powell, and Milberg (1987) and the Exchange Orientation Scale developed by Clark, Taraban, Ho, and Wesner (1989) and was intended to represent an extension of their ideas.

A principal components factor analysis (with oblique rotation) was performed on the SRS items to determine whether the statements on the SRS would form two separate clusters ($N = 158$; Hughes & Snell, 1990). The pattern matrix loadings for the females clearly provided support for the expected two factor structure, with conceptually similar items loading together (the results for the males were less clear, given the small sample size). Factor I consisted of *Sexual Communion* items (eigenvalue = 4.81, percent of variance = 20%), and Factor II contained *Sexual Exchange* items (eigenvalue = 2.98, percent of variance = 12%).

Response Mode and Timing

The SRS consists of 24 items. Respondents indicate how characteristic the SRS items are of them on the following Likert-type scale: A (*not at all characteristic of me*), B (*slightly characteristics of me*), C (*somewhat characteristic of me*), D (*moderately characteristic of me*), and E (*very characteristic of me*). The measure can be administered online or on paper. The questionnaire usually takes about 10–15 minutes to complete.

Scoring

Participants respond to the SRS items on a 4-point Likert-type scale ranging from 0 (*not at all characteristic of me*) to 4 (*very characteristic of me*). Items 6, 8, 10, and 18 are reverse coded. The SRS consists of two subscales, each containing eight separate items. The labels and items for these two subscales are: the *Exchange Approach to Sexual Relations* (Items 2, 6, 8, 10, 12, 14, 16, and 18) and the *Communal Approach to Sexual Relations* (Items 1, 3, 4, 9, 13, 15, 21, and 24). The other items are not included in subscale calculations. The eight items on each subscale are summed so that higher scores indicate a stronger communal and exchange approach, respectively, to sexual relations.

Reliability

The internal consistency of the two SRS subscales was determined by computing Cronbach's alpha coefficients

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for both females and males, as well as for the combined group of subjects (Hughes & Snell, 1990). For the *Sexual Communion* subscale, the coefficients were .77 for males, .79 for females, and .78 for both combined. The coefficients for the *Sexual Exchange* subscale were .59 for males, .67 for females, and .67 for both. Another study found an internal consistency of .59 for female participants (Lueken, 2002). Other analyses have revealed that, among females, the two SRS subscales are essentially orthogonal to one another (Hughes & Snell, 1990).

Validity

Hughes and Snell (1990) found that males reported significantly higher scores than females on the *Sexual Exchange* subscale, but no difference was found for the *Sexual Communion* subscale. Further evidence for the validity of the SRS was obtained by correlating the SRS subscales with Clark's Communal and Exchange Orientation Scales. The *Sexual Communion* subscale was significantly and positively correlated with the Communal Orientation Scale for females and for the whole sample. Significant and positive correlations were also found between the *Sexual Exchange* orientation subscale and scores on the Exchange Orientation Scale for males, females, and both together. In addition, the SRS was found to be related to relationship satisfaction. Among males, a significant negative relationship was found between an exchange approach to sexual relations and their relationship satisfaction. The analysis for the females, in contrast, revealed a statistically significant positive correlation between relationship satisfaction and a communal approach to sexual relations.

The SRS was assessed for validity in Heidari, Zalpour, and Molaii (2011) and was determined to be better as a 17-item three factorial structure: communal orientation, exchangenal orientation, and demand.

The SRS was also used in Couperthwaite (2014) to explore love styles and attachment as predictors of relationship satisfaction among heterosexual and sexual and gender minority adults, however the two-factor structure was not supported.

A further study looking at sexual approaches in feminist and non-feminist men found that non-feminist men were more likely to expect something in exchange for giving their partner pleasure than feminist or unsure men. However, men in all three groups (feminist, non-feminist, unsure) cared about giving their partner pleasure (Silver, Chadwick, & van Anders, 2019).

These patterns of correlations thus provide preliminary evidence for the construct validity of the SRS, in that (a) those individuals characterized by a stronger communal approach to their sexual relations were expected to report greater satisfaction with their intimate relationships and to approach their partners with a more caring and companionate perspective and (b) those individuals characterized by an exchange approach to their sexual relations were expected to have a similar exchange approach to their adult romantic relationships and to report less satisfaction with their romantic relationships.

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Exhibit

Sexual Relationship Scale

Listed below are several statements that concern the topic of sexual relationships. Please read each of the following statements carefully and decide to what extent it is characteristic of you. Some of the items refer to a specific relationship. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never had a relationship, answer in terms of what you think your responses would most likely be. Then, for each statement fill in the response on the answer sheet that indicates how much it applies to you by using the following scale. Remember to respond to all items, even if you are not completely sure. Your answers will be kept in the strictest confidence. Also, please be honest in responding to these statements.

	Not at all characteristic of me	Slightly characteristic of me	Somewhat characteristic of me	Moderately characteristic of me	Very characteristic of me
1. It would bother me if my sexual partner neglected my needs.	○	○	○	○	○
2. When I make love with someone, I generally expect something in return.	○	○	○	○	○
3. If I were to make love with a sexual partner, I'd take that person's needs and feelings into account.	○	○	○	○	○
4. If a sexual partner were to do something sensual for me, I'd try to do the same for him/her.	○	○	○	○	○
5. I'm not especially sensitive to the feelings of a sexual partner.	○	○	○	○	○
6. I don't think people should feel obligated to repay an intimate partner for sexual favors.	○	○	○	○	○
7. I don't consider myself to be a particularly helpful sexual partner.	○	○	○	○	○
8. I wouldn't feel all that exploited if an intimate partner failed to repay me for a sexual favor.	○	○	○	○	○
9. I believe sexual lovers should go out of their way to be sexually responsive to their partner.	○	○	○	○	○
10. I wouldn't bother to keep track of the times a sexual partner asked for a sensual pleasure.	○	○	○	○	○
11. I wouldn't especially enjoy helping a partner achieve their own sexual satisfaction.	○	○	○	○	○
12. When a person receives sexual pleasures from another, s/he ought to repay that person right away.	○	○	○	○	○
13. I expect a sexual partner to be responsive to my sexual needs and feelings.	○	○	○	○	○
14. It's best to make sure things are always kept "even" between two people in a sexual relationship.	○	○	○	○	○
15. I would be willing to go out of my way to satisfy my sexual partner.	○	○	○	○	○
16. I would do a special sexual favor for an intimate partner, only if that person did some special sexual favor for me.	○	○	○	○	○
17. I don't think it's wise to get involved taking care of a partner's sexual needs.	○	○	○	○	○
18. If my sexual partner performed a sexual request for me, I wouldn't feel that I'd have to repay him/her later on.	○	○	○	○	○
19. I'm not the sort of person who would help a partner with a sexual problem.	○	○	○	○	○
20. If my sexual partner wanted something special from me, s/he would have to do something sexual for me.	○	○	○	○	○

21. If I were feeling sexually needy, I'd ask my sexual partner for help.	○	○	○	○	○
22. If my sexual partner became emotionally upset, I would try to avoid him/her.	○	○	○	○	○
23. People should keep their sexual problems to themselves.	○	○	○	○	○
24. If a sexual partner were to ignore my sexual needs, I'd feel hurt.	○	○	○	○	○

The Definitions of Infidelity Questionnaire

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Although the majority of adults disapprove of infidelity (Negash, Cui, Fincham, & Pasley, 2014), 24 percent to 75 percent of men and women report having engaged in infidelity at some point in their lives (Shackelford, LeBlanc, & Drass, 2000; Tafoya & Spitzberg, 2007; Thompson & O'Sullivan, 2016a). These estimates likely vary to this marked degree because of diverse definitions that are used by researchers, calling into question the internal validity of the measures and methods used to assess infidelity. In fact, researchers have often failed to define infidelity for the participants or have defined it so narrowly (i.e., intercourse only) as to exclude the possibility of incorporating other meaningful or common forms of infidelity (Treas & Giesen, 2000). For example, research reveals that adults report higher rates of infidelity when using a broad definition ("any form of romantic and/or sexual involvement") than when using a narrow definition referring only to direct sexual infidelity (Brand, Markey, Mills, & Hodges, 2007). Thus, to advance work in this field and to define infidelity in a meaningful and comprehensive way, the Definitions of Infidelity Questionnaire (DIQ) was developed (Thompson & O'Sullivan, 2016b).

Development

The development of the DIQ was initially informed by selecting items from related measures and expanding upon these items in consultation with researchers working in the area of sexuality and intimate relationships. In addition, a pilot study using semi-structured interviews was conducted with 15 young adults to develop additional items and to establish content validity.

After pilot work, 601 adults completed the initial 45-item version of the DIQ to assist with item selection and factor structure evaluation. The results of a maximum-likelihood exploratory factor analysis with a promax rotation revealed that a four-factor solution was ideal and accounted for 68.9 percent of the variance. After establishing the initial factor structure and reducing items, a sample of 541 adults was used when confirming the factor structure of the DIQ via confirmatory factor analysis (CFA). After making improvements to the model's fit via specification, the final CFA replicated the initial factor structure, with a final scale including 32 items organized into four subscales (the *Sexual/Explicit Behavior* subscale; the *Emotional/Affectionate Behavior* subscale; the *Technology/Online Behavior* subscale; and the *Solitary Behavior* subscale).

Response Mode and Timing

Participants completing the DIQ are asked to imagine a current, ex, or hypothetical partner engaging in the 32 behaviors comprising the DIQ and then rate each behavior using a 7-point scale ranging from 1 (*not at all unfaithful*) to 7 (*very unfaithful*).

Scoring

Scores on the DIQ are computed to obtain an average restrictiveness score. This score can be used to indicate to

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what extent, on average, respondents' judge DIQ behaviors as comprising infidelity. An overall DIQ score can be computed by taking the mean of the 7-point Likert scores for each item on the DIQ, with higher scores indicating more restrictive judgments. Subscale DIQ scores are computed by applying the same method to the specific items comprising each subscale. Items 1–7 belong to the *Sexual/Explicit Behaviors* subscale, 8–14 to the *Technology/Online Behaviors* subscale, 15–27 to the *Emotional/Affectionate Behaviors* subscale, and 28–32 to the *Solitary Behaviors* subscale.

Reliability

The DIQ has demonstrated excellent internal consistency as evidenced by the following Cronbach's alphas: *Sexual/Explicit Behaviors* subscale, α = .95–.97; *Emotional/Affectionate Behaviors* subscale, α = .94–.95; *Technology/Online Behaviors* subscale, α = .91–.99; *Solitary Behaviors* subscale, α = .88 (Thompson & O'Sullivan, 2016a, 2016b; Thompson, Zimmerman, Kulibert, & Moore, 2017). The DIQ also produced respectable six-week test–retest reliability, as evidenced by a strong positive intraclass correlation between the first and second administration, $r(156) = .96$, $p < .001$.

Validity

Convergent validity of the DIQ was assessed by calculating Pearson product-moment correlations between the scores on the DIQ and scores on scales assessing the coping strategies employed by adults who experience attraction to extradyadic individuals (Coping With Unwanted Sexual Situations Scale; CUSSS; Worthington, Heizenroth, Berry, & Berry, 2001), adults' feelings of attraction toward others outside of their primary relationship (Assessing Multiple Facets of Attraction; AMFA; Diamond, 2011), and permissive sexual attitudes (Brief Sexual Attitudes Scale—Permissiveness Subscale; BSAS-P; Hendrick, Hendrick, & Reich, 2006). The DIQ was significantly correlated with these other theoretically related measures, CUSSS ($r = .14$, $p < .001$), AMFA ($r = –.12$, $p < .001$), and BSAS-P ($r = –.33$, $p < .001$), providing support for its construct validity.

To establish discriminant validity, two additional versions of the DIQ were created: one measuring attitudes toward infidelity (to what extent the behaviors were "unacceptable") and one measuring affective reactions (to what extent the behaviors would be "upsetting"). The results from a repeated measures ANOVA indicated that the DIQ had acceptable discriminant validity and that judgments of infidelity were rated significantly differently than were attitudes and affect, $F(2, 538) = 13.88$, $p < .001$, $\eta p^2 = .02$. In particular, adults' judgments ($M = 4.30$, $SD = .97$) were more permissive than were their attitudes ($M = 4.44$, $SD = 1.20$) and their affective reactions ($M = 4.47$, $SD = 1.11$).

Finally, concurrent and predictive validity was established by assessing the extent to which DIQ scores could predict scores on the attitude and affective version of the DIQ as well as experience with the 32 behaviors. The results of three separate regressions indicated that infidelity judgments significantly predicted attitudes, $R^2 = .64$, $F(1, 539) = 944.65$, $p < .001$, affective reactions, $R^2 = .78$, $F(1, 539) = 857.09$, $p < .001$, and experience with infidelity, $R^2 = .06$, $F(1, 539) = 35.81$, $p < .001$, providing evidence of its predictive validity.

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Exhibit

The Definitions of Infidelity Questionnaire (DIQ)

Please imagine your current or ex-partner (or a potential partner if you have never been in a romantic relationship) engaging in the following behaviors with someone other than you despite being in a relationship with you at the time. For each item, indicate to what extent you would think your partner was "unfaithful" on a scale from 1 (*not at all unfaithful*) to 7 (*very unfaithful*) if they engaged in each of the following behaviors.

	1 Not at all unfaithful	2	3	4	5	6	7 Very unfaithful
1. Engaging in penile–anal intercourse with someone.	○	○	○	○	○	○	○
2. Engaging in penile–vaginal intercourse with someone.	○	○	○	○	○	○	○
3. Giving someone oral sex.	○	○	○	○	○	○	○
4. Receiving oral sex from someone.	○	○	○	○	○	○	○
5. Touching someone's genitals.	○	○	○	○	○	○	○
6. Taking a shower with someone.	○	○	○	○	○	○	○
7. Kissing someone intensely.	○	○	○	○	○	○	○
8. Sending sexually explicit messages by text or e-mail to someone.	○	○	○	○	○	○	○
9. Sending affectionate/flirtatious texts or email to someone.	○	○	○	○	○	○	○
10. Receiving sexually explicit messages by text or e-mail from someone.	○	○	○	○	○	○	○
11. Masturbating with someone over webcam.	○	○	○	○	○	○	○
12. Receiving affectionate/flirtatious texts or e-mails from someone.	○	○	○	○	○	○	○
13. Browsing an online dating website alone.	○	○	○	○	○	○	○
14. Creating a profile on a dating website.	○	○	○	○	○	○	○
15. Accompanying someone to a formal event.	○	○	○	○	○	○	○
16. Providing someone with close emotional support.	○	○	○	○	○	○	○
17. Having a casual dinner with someone.	○	○	○	○	○	○	○
18. Doing favors for someone.	○	○	○	○	○	○	○
19. Watching movies in a dark living room with someone.	○	○	○	○	○	○	○
20. Working/studying late with someone.	○	○	○	○	○	○	○
21. Sharing secrets with someone.	○	○	○	○	○	○	○
22. Being tagged in pictures with someone unknown on a social networking site.	○	○	○	○	○	○	○
23. Kissing someone on the cheek.	○	○	○	○	○	○	○
24. Liking/following someone on social media.	○	○	○	○	○	○	○
25. Giving someone a gift.	○	○	○	○	○	○	○
26. Receiving close emotional support from someone.	○	○	○	○	○	○	○
27. Dressing in a way to attract sexual attention.	○	○	○	○	○	○	○
28. Viewing pornographic videos online alone.	○	○	○	○	○	○	○
29. Viewing pornographic magazine alone.	○	○	○	○	○	○	○
30. Engaging in masturbation alone.	○	○	○	○	○	○	○
31. "Checking out" (or admiring the look of) a waiter/waitress.	○	○	○	○	○	○	○
32. Finding a celebrity attractive.	○	○	○	○	○	○	○

20 Motivations

The Pretending Orgasm Reasons Measure

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Purpose

Pretending orgasm is a relatively common phenomenon, with about 25–60 percent of both men and women reporting pretending an orgasm at least once in their lifetime (Bryan, 2001; Darling & Davidson, 1986; Muehlenhard & Shippee, 2010; Wiederman, 1997), yet the amount of research does not match the commonness of this experience; it often focuses on descriptions of pretending behavior, rather than reasons for pretending orgasm (Darling & Davidson, 1986; Hite, 1976). Much of the literature has been qualitative and not driven by theory. We used an empirical approach to develop the 48-item Pretending Orgasm Reasons Measure (PORM; Goodman, Gillath, & Haj-Mohamadi, 2017). The PORM assesses both men's and women's reasons for pretending orgasm. The scale measures six factors: Feels Good, For Partner, Not Into Sex, Manipulation/Power, Insecurity, and Emotional Communication. Several factors were made up of subfactors, including For Partner (*Protect Partner, Please Partner*, and *Increases Partner's Arousal*), Manipulation/Power (*Manipulation* and *Power*), Insecurity (*Desire to Fit In* and *Fear of Rejection*), and Emotional Communication (*Reassurance/Feel Loved, Express Love*, and *Closeness*).

Development

We used an iterative process to reach the final measure of 49 items. Initially, we used a phenomenological approach to obtain a pool of reasons to pretend orgasm, asking 46 undergraduates to list all the reasons why they have pretended orgasm. Then, we used a diverse list of sources, including previously validated measures of motivations for sexual behavior (Davis, Shaver, & Vernon, 2004; Hill & Preston, 1996), several self-report qualitative surveys (e.g., Muehlenhard & Shippee, 2010), and our own participants' reports, which produced 204 total items. Several items were also added for theoretical reasons, including seven items related to attachment theory. This initial version of the PORM was completed by an online sample that had pretended orgasm at least once. This sample consisted of a majority of women, with a mean age of 27 (SD = 9.55; N = 416). Participants completed the survey via the Department of Psychology online research portal (SONA), Craigslist, and postings on other online research listings. These 204 items were then systematically evaluated to produce a reliable and valid measure. A series of exploratory factor analyses yielded a 6-factor solution about reasons to pretend orgasm: For Fun, For Partner, Not Into Sex, Manipulation/Power, Insecurity, and Emotional Communication. These factors were organized into ten additional subfactors. We suppressed items that loaded below .40 or loaded highly on more than one factor. Items were also chosen based on a hierarchical approach to streamline the measure while maintaining usefulness.

Finally, this structure was retested and confirmed using a new sample. The PORM was administered to an online sample of men and women who had pretended orgasm at least once. The sample was predominantly women, and the mean age was 31 (SD = 11.49; N = 1010).

An analysis of the six factors defined by the 48 PORM items, including modeling correlations among all factors, resulted in a moderate fit to the data, SRMR = .09, RMSEA = .08, 90% CI [.08–.08], CFI = .77, TLI = .76. We then examined the possibility that the data would fit better to a higher-order model, with the subfactors previously identified nested within the factors. Model fit indexes did improve for this higher-order model, SRMR = .09, RMSEA = .07, 90% CI [.07– .07], CFI = .83, TLI = .81, with correlated factors, $\chi 2$ (8) = 1328, $p < 05$. All the items loaded significantly onto all of the subfactors, and each subfactor loaded significantly onto its main factor.

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This suggests that our model of six factors with 10 subfactors was an adequate description of the data.

Response Mode and Timing

The measure can be completed either electronically or in paper form in approximately ten minutes. Items refer to reasons to pretend orgasm generally; not in a specific situation. All items start with the root, *I pretend orgasm because . . .* Using a scale ranging from 1 (*disagree strongly)* to 7 (*strongly agree)*, participants are asked how much they agree with each statement.

Scoring

No items are reverse coded. There were three attention check items included (Items 24, 41 and 50). The items from each scale and subscale can be averaged to create both scale and subscale scores (see Table 1). Higher scores reflect greater agreement with each reason to pretend orgasm. There were gender differences on the factors of the PORM (See Table 2). Women reported significantly more pretended orgasms due to the reason For Partner, $t(1034) = 4.28$, $d = .32$, $p = .0001$. Men reported significantly more pretending orgasms due to the reasons: *Insecure,* $t(1034) = -5.08$, $d = .40$, $p = .0001$, *Emotional Communication,* $t(1034) = -2.32$, $d = -.18$, $p = .02$, and *Manipulation/Power,* $t(1034) = -4.12$, $d = -.29$, $p = .0001$. There were no significant gender differences on *Feels Good* and *Not Into Sex*.

TABLE 1
Scales, Subscales and Item Numbers for PORM

Scale	Item Number
Feels Good	8, 15, 18, 22, 26, 30, 49
For Partner	
Protect Partner	7, 35, 40
Please Partner	1, 20, 33, 38
Increase Partner's Arousal	3, 14, 39, 51
Not Into Sex	2, 11, 16, 36, 45
Manipulation/Power	
Manipulation	4, 12, 21, 37, 52
Power	19, 25, 44
Insecurity	
Desire to Fit In	13, 27, 29, 48
Fear of Rejection	5, 10, 32, 34, 42
Emotional Communication	
Reassurance/Feel Loved	17, 31, 43
Express Love	6, 23, 47
Closeness	9, 28, 46

TABLE 2
Gender Comparisons on PORM Scales

	Women[a]		Men[b]	
	M	***SD***	***M***	***SD***
Feels Good	2.94	1.33	3.00	1.26
For Partner**	5.02	1.33	4.60	1.33
Insecure**	2.76	1.30	3.24	1.23
Emotional Communication*	3.08	1.40	3.32	1.29
Manipulation/Power**	2.24	1.23	2.61	1.28
Not Into Sex	3.97	1.64	3.88	1.55

[a]$n = 796$. [b]$n = 240$.
*$p < .05$. **$p < .01$.

Reliability

Internal consistency on the PORM's six scales was demonstrated with Cronbach's alphas of .87 for Feels Good, .91 For Partner, .87 for Not into Sex, .91 for Manipulation/Power, .88 for Insecurity, 90 for Emotional Communication., and .79 for Emotional Communication.

Validity

Convergent and discriminant validity were assessed using the Arizona Sexual Experiences Scale (McGahuey et al., 2000) and a scale assessing tendency to deceive others (Cole, 2001). We hypothesized that reasons for pretending orgasm may be related to difficulty achieving orgasm or other sexual issues. Using the Bonferroni adjusted alpha levels ($p < .017$), sexual dysfunction was also found to positively correlate with a few of the PORM factors, including Insecure, $r(1047) = .18$, $p = .0001$, and Not into Sex, $r(1043) = .19$, $p = .0001$. Additionally, sexual dysfunction was positively correlated with pretending For Partner, $r(1047) = .08$, $p = .006$ and Emotional Communication, $r(1047) = .10$, $p = .001$. The small correlations suggested that though related as expected, there are important differences between the constructs of sexual dysfunction and reason for pretending orgasm. Additionally, the data suggest that the factor Not into Sex is not simply an index of sexual dysfunction but a distinct construct. We were also interested in measuring tendency to pretend orgasm, separately from tendency to deceive generally. Tendency to pretend an orgasm was not correlated with the general tendency to mislead, $r(1473) = .04$, $p = .103$. This suggested that pretending an orgasm is different from the general tendency to cheat or lie.

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Exhibit

Pretending Orgasm Reasons Measure

For the purpose of the survey "pretend orgasm" means:

- Acting (moving around/making noises) like you are having an orgasm even though you are not
- Not correcting your partner's false assumption that you had an orgasm
- Saying that you had an orgasm when you did not have one

The following statements concern reasons that people might pretend to have an orgasm, act like they had an orgasm when they did not, or tell their partner they had an orgasm when they had not had one. Respond to each statement by indicating how much it has applied to *you*, on a scale from disagree strongly to agree strongly.

If you have *pretended orgasm in your current relationship*, focus ***only*** on your reasons for pretending in your ***current*** *relationship*.

If you have ***not*** pretending orgasm in your current relationship, or are not in a current relationship, focus on reasons *that have* ***ever*** *applied to you, in* ***any*** *relationship*.

Some items may seem similar. Please read each one carefully.

I pretend orgasm because …

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1. …it makes my partner feel good about him/herself.	○	○	○	○	○	○	○
2. …I am ready for sex to be over.	○	○	○	○	○	○	○
3. …I want my partner to have an orgasm.	○	○	○	○	○	○	○
4. …it gets me other things I want from my partner.	○	○	○	○	○	○	○
5. …I feel insecure about my partner's feelings for me.	○	○	○	○	○	○	○
6. …it makes my partner love me more.	○	○	○	○	○	○	○
7. …I do not want to hurt my partner's feelings.	○	○	○	○	○	○	○
8. …it makes me feel loved.	○	○	○	○	○	○	○
9. …the sense of emotional closeness I experience with my partner is a satisfying way of feeling valued.	○	○	○	○	○	○	○
10. …I am afraid my partner will leave me if I don't.	○	○	○	○	○	○	○
11. …sex is not enjoyable.	○	○	○	○	○	○	○
12. …my partner would do or give me something I wanted.	○	○	○	○	○	○	○
13. …I don't want to seem abnormal or inadequate.	○	○	○	○	○	○	○
14. …I want to encourage my partner and improve my sexual experience.	○	○	○	○	○	○	○
15. …I want to make myself feel better.	○	○	○	○	○	○	○

16. …I want the sexual encounter to be over.	○	○	○	○	○	○	○
17. …it helps to reassure me about where the relationship stands.	○	○	○	○	○	○	○
18. …of the physical enjoyment.	○	○	○	○	○	○	○
19. …I enjoy exerting dominance and control over my partner.	○	○	○	○	○	○	○
20. …it boosts my partner's confidence.	○	○	○	○	○	○	○
21. …it is a way to get other things I want from my partner.	○	○	○	○	○	○	○
22. …I get caught up in the moment.	○	○	○	○	○	○	○
23. …it makes my partner feel loved.	○	○	○	○	○	○	○
24. …to show that I am paying attention I will check "Agree."	○	○	○	○	○	○	○
25. …of the sense of power that I feel I have over my partner.	○	○	○	○	○	○	○
26. …it seems to improve my outlook on life when nothing seems to be going right.	○	○	○	○	○	○	○
27. …I don't want my partner to think I am a bad sex partner.	○	○	○	○	○	○	○
28. …it makes me feel emotionally close to my partner.	○	○	○	○	○	○	○
29. …I worry if I don't, it will "turn off" my partner.	○	○	○	○	○	○	○
30. …it is exciting and satisfying.	○	○	○	○	○	○	○
31. …I need to feel understood and when I want to relate to my partner on a one to one level.	○	○	○	○	○	○	○
32. …I don't want to have an argument with my partner.	○	○	○	○	○	○	○
33. …it pleases my partner.	○	○	○	○	○	○	○
34. …I am worried my partner will leave me if s/he thought I hadn't had an orgasm.	○	○	○	○	○	○	○
35. …I do not want my partner to feel inadequate.	○	○	○	○	○	○	○
36. …I have lost interest in the sexual encounter.	○	○	○	○	○	○	○
37. …I have wanted my partner to think I had an orgasm, even when I did not.	○	○	○	○	○	○	○
38. …it makes my partner happy.	○	○	○	○	○	○	○
39. …I want my partner to remain involved in sex.	○	○	○	○	○	○	○
40. …I do not want my partner to feel self-conscious.	○	○	○	○	○	○	○
41. …I am paying attention, I will choose "neutral."	○	○	○	○	○	○	○
42. …I am afraid my partner will get angry at me if I don't.	○	○	○	○	○	○	○
43. …I need s/he to notice me and appreciate me.	○	○	○	○	○	○	○
44. …I feel a sense of superiority and power when I am expressing myself by pretending orgasm.	○	○	○	○	○	○	○
45. …sex is taking too long and I want to be finished.	○	○	○	○	○	○	○
46. …the sense of emotional bonding with my partner is an important way of feeling close to him or her.	○	○	○	○	○	○	○
47. …it is a way to express love to my partner.	○	○	○	○	○	○	○
48. …an orgasm during sex is a societal expectation.	○	○	○	○	○	○	○
49. …it feels good to do it.	○	○	○	○	○	○	○
50. …to show I am reading, I will choose "disagree."	○	○	○	○	○	○	○
51. …it increases my partner's arousal.	○	○	○	○	○	○	○
52. …it is a powerful tool I can use to get other things I want from my partner.	○	○	○	○	○	○	○

The Sexual Motivation Scale

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The Sexual Motivation Scale (SexMS) is a 24-item self-report measure of the six types of self-regulation proposed by self-determination theory (SDT; Deci & Ryan, 2000) in the context of sexual activities: intrinsic motivation, four types of extrinsic motivation (i.e., external, introjected, identified, and integrated), and amotivation. Specifically, the SexMS measures the extent to which a person's reasons to engage in sexual activities are self-determined or non-self-determined.

SDT is a broad framework of motivation that delineates internal and external sources of motivation and their role in development and well-being. According to SDT, humans have a natural tendency toward optimal growth and internalization of their experiences into a unified sense of self (Deci & Ryan, 2000). A person is self-determined when their behaviours are freely chosen and self-congruent, as opposed to being pressured or coerced (Deci & Ryan, 2000). Most importantly, self-determined behaviors are more likely to result in well-being and optimal functioning, such as better health, positive relationships, and better performance in school, sports, and work (for a review, see Deci & Ryan, 2017).

The six types of regulation (i.e., the mobilization of efforts and energy) fall on a self-determination continuum (Deci & Ryan, 2000). *Intrinsic motivation* is at the most self-determined pole of the continuum; the behavior is performed for its own sake as it is experienced as inherently pleasurable and interesting. *Amotivation* is at the least self-determined pole of the continuum; it designates a lack of motivation and a lack of involvement of the self. *Extrinsic motivation* occupies the center of the continuum and regulates instrumental behaviors. The four types of extrinsic motivation vary in self-determination depending on the extent to which the behaviour has been internalized. *External regulation* is the least self-determined type of extrinsic motivation; the behavior has not been internalized and is entirely driven by pressuring external demands (e.g., rewards, avoidance of negative outcomes). *Introjected regulation* is also non-self-determined; it is partially internalized and driven by pressuring internal demands (e.g., avoidance of shame and guilt, enhancement of self-worth). *Identified regulation* is more self-determined; it is better internalized as the behavior is viewed as personally significant (e.g., achieving an important outcome). *Integrated regulation* is the most self-determined type of extrinsic motivation; the behavior is fully internalized as it is integrated with core values and identities (e.g., expressing a fundamental part of the self).

Development

An initial pool of 87 items was developed in French from three focus groups in which community-sampled women and men were asked to list the reasons why they engaged in sexual activities (Green-Demers, Séguin, Chartrand, & Pelletier, 2002). Responses were adapted to correspond to SDT regulations (i.e., three types of intrinsic motivation, integrated, identified, introjected and external regulations, and amotivation). Following initial validation, the final pool contained 30 items and the scale was translated in English (Green-Demers et al., 2002). The items were subsequently revised and the SexMS was reduced to 24 items by creating one scale for intrinsic motivation in order to improve construct validity.

The SexMS is intended for use with the general population, regardless of age, relationship status and type, sexual orientation, and cultural background. So far, validation has been conducted with university students (Gravel, Pelletier, & Reissing, 2016) and the scale has been used in research conducted with midlife and older women (VanZuylen, Gravel, & Reissing, 2015). Further validation with diverse samples is required.

Response Mode and Timing

Respondents are asked to think about the reasons why they engage in sexual activities in general and rate their degree of agreement for each item using a 7-point Likert scale ranging from 1 (*Does not correspond at all*) to 7 (*Corresponds completely*). The measure is typically completed within two to four minutes.

Scoring

Subscales for each type of regulation are computed by averaging their respective items: *intrinsic motivation* = 1, 6, 16, 21; *integrated regulation* = 5, 10, 15, 17; *identified regulation* = 3, 12, 19, 22; *introjected regulation* = 7, 14, 20, 24; *external regulation* = 2, 8, 11, 18; *amotivation* = 4, 9, 13, 23. For a discussion on other scoring methods used in SDT research, see Pelletier and Sarrazin (2007).

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Reliability

Reliability analyses using Cronbach's alpha demonstrated that each subscale has good to excellent reliability, with coefficients ranging between .83 and .90 (Gravel et al., 2016).

Validity

The validity of the SexMS was analyzed in two studies (Study 1: $N = 1070$; Study 2: $N = 590$; Gravel et al., 2016). Findings from confirmatory factor analyses suggested that the SexMS presented good factorial validity. The measure adequately reproduced the six types of regulation proposed by SDT, as suggested by high factor loadings ($\lambda = .58–.88$) and adequate fit indices values (RMSEA = .057–.063, CFI = .94–.95, TLI = .93–.94). Measurement invariance of the factor structure was established for gender (RMSEA = .045, CFI = .94, TLI = .93) and relationship type (i.e., casual and committed; RMSEA = .046, CFI = .94, TLI = .93). Additionally, the SexMS demonstrated good discriminant validity with SDT measures of motivation for committed relationships (rs $\leq$ .45) and global motivation (rs $\leq$ .35). The SexMS also showed good concurrent validity as it captured important individual differences in sexual health and well-being outcomes. Stronger endorsement of self-determined motives (i.e., *intrinsic, integrated*, and *identified*) were linked to better sexual satisfaction and lower sexual distress (*intrinsic* scale only), whereas stronger endorsement of non-self-determined motives (i.e., *introjected, external*, and *amotivation*) were linked to higher sexual distress and lower sexual satisfaction. Furthermore, stronger endorsement of self-determined motives was associated with better sexual function, whereas the reverse was found for non-self-determined motives. Importantly, SexMS scores differentiated respondents who scored above versus below established cut-offs for clinically significant problems with sexual function. Specifically, respondents with more severe sexual function problems reported weaker endorsement of self-determined sexual motives and stronger endorsement of non-self-determined sexual motives.

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Exhibit

Sexual Motivation Scale (SexMS)

There are many reasons why people have sexual relationships. Please indicate to what extent each of the statements below corresponds to your motives for having sexual relationships in general by checking the appropriate number.

	1 Does not correspond at all	2	3	4 Corresponds moderately	5	6	7 Corresponds completely
1. Because sex is fun.	○	○	○	○	○	○	○
2. Because my partner demands it of me.	○	○	○	○	○	○	○
3. Because sexuality is a normal and important aspect of human development.	○	○	○	○	○	○	○
4. I don't know; I feel it's not worth it.	○	○	○	○	○	○	○
5. Because sexuality brings so much to my life.	○	○	○	○	○	○	○

6. Because I enjoy sex.	○	○	○	○	○	○	○
7. To prove to myself that I am sexually attractive.	○	○	○	○	○	○	○
8. To avoid conflicts with my partner.	○	○	○	○	○	○	○
9. I don't know; it feels like a waste of time.	○	○	○	○	○	○	○
10. Because sexuality is a key part of who I am.	○	○	○	○	○	○	○
11. Because I don't want to be criticized by my partner.	○	○	○	○	○	○	○
12. Because I feel it's important to experiment sexually.	○	○	○	○	○	○	○
13. I don't know; actually, I find it boring.	○	○	○	○	○	○	○
14. To show myself that I am sexually competent.	○	○	○	○	○	○	○
15. Because sexuality is a meaningful part of my life.	○	○	○	○	○	○	○
16. For the pleasure I feel when my partner stimulates me sexually.	○	○	○	○	○	○	○
17. Because sexuality fulfills an essential aspect of my life.	○	○	○	○	○	○	○
18. To live up to my partner's expectations.	○	○	○	○	○	○	○
19. Because I think it is important to learn to know my body better.	○	○	○	○	○	○	○
20. To prove to myself that I am a good lover.	○	○	○	○	○	○	○
21. Because sex is exciting.	○	○	○	○	○	○	○
22. Because I feel it's important to be open to new experiences.	○	○	○	○	○	○	○
23. I don't know; sex is a disappointment to me.	○	○	○	○	○	○	○
24. To prove to myself that I have sex-appeal.	○	○	○	○	○	○	○

Affective and Motivational Orientation Related to Erotic Arousal Questionnaire

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The Affective and Motivational Orientation Related to Erotic Arousal Questionnaire (AMORE) is a self-report questionnaire designed to measure individual differences in eight dispositional sexual motives proposed within a construct of intrinsic sexual motivation. The questionnaire consists of 62 statements rated on a

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5-point Likert-type scale. A dispositional sexual motive is a relatively stable interest in obtaining gratification from a specific outcome associated with sexual behavior or sexual interaction. Intrinsic sexual motivation is the desire or interest in outcomes inherent in sexual expression, those that cannot be experienced except through sexual expression. The eight sexual motives assessed by the AMORE are the desire to (a) feel valued by one's partner, (b) express value for one's partner, (c) obtain relief from negative emotional states, (d) provide nurturance and comfort to one's partner, (e) enhance one's power, (f) experience the power of one's partner, (g) experience sensuality and physical pleasure, and (h) procreate. The eight motives are considered to be important factors influencing individuals to engage in sexual behavior (Hill & Preston, 1996).

Development

To begin the instrument development process, an initial pool of 101 statements was constructed to convey the theoretical and conceptual essence of a given sexual motive, a theory-driven process. The focus of each statement is one of the eight sexual motives identified within the construct of intrinsic sexual motivation presented in the previous section.

Principal components analysis of responses to the statements by 612 college students confirmed the existence of eight motive dimensions for 62 of the items; 39 items were eliminated based on this analysis because of low factor loadings, or loading highly on more than one factor. The selected 62 items were administered to two additional groups of college students (*N*s = 586 and 396), and each set of responses was separately factor analyzed. Both analyses produced solutions highly similar to the one for the initial sample of respondents, confirming the presence of eight stable factors. The instrument has been employed with noncollege-student samples, as well.

Response Mode and Timing

The AMORE is a self-report questionnaire. Each of the 62 statements is evaluated by respondents on a five-point Likert-type scale regarding the extent to which they are characteristic of them. The response scale is labeled at the low extreme with *Not at all True, Moderately True* at the midpoint, and *Completely True* at the high extreme. The alphabetic letters A through E represent each of the points on the scale. The typical amount of time required to complete the questionnaire is approximately 15–20 minutes.

Scoring

The AMORE consists of eight subscales measuring each of the theoretically derived sexual motive dimensions. Responses are converted to numeric values in the following way: A = 1, B = 2, C = 3, D = 4, and E = 5. Item 21 is coded in the reverse direction. Values for items on each subscale are added together to create a total subscale score. The items belonging to each subscale are shown in Table 1.

TABLE 1
Items Belonging to Subscales of the AMORE

Subscale	Item numbers
Valued by Partner	1, 9, 14, 26, 35, 36, 38
Value for Partner	17, 43, 44, 49, 55, 59, 60, 61
Relief from Stress	3, 12, 20, 27, 28, 31, 37, 39, 40, 45
Nurturance	2, 10, 33, 52, 57, 62
Expression of Power	6, 7, 11, 16, 41, 46, 48, 53, 56, 58
Experience Partner's Power	5, 13, 19, 23, 25, 29, 47, 50, 51, 54
Pleasure and Sensuality	18, 22, 24, 30, 34
Procreation	4, 8, 15, 21, 32, 42

Reliability

Internal consistency coefficients (alphas) for the subscales have ranged from .76 (for the *Procreation* subscale) to .95 (for the *Relief From Stress* and *Partner Power* subscales) across a number of samples. Most coefficients are typically greater than .85 (Hill, 1997b, 2002, 2016; Hill & Preston, 1996).

Validity

A number of studies have supported the validity of the eight AMORE subscales. The convergent and divergent validity of the AMORE subscales have been established through correlations with scores on measures of constructs theoretically related and unrelated, respectively, to the sexual motivation constructs (Hill & Preston, 1996). The distinctiveness of the subscales was supported in reactions to eight role-played sexual scenarios designed to be uniquely relevant to each of the eight sexual motives. Reported likelihood of engaging in sexual behavior in each situation was correlated most strongly with scores on the theoretically most relevant AMORE scale (e.g., likelihood of sexual behavior in a situation focused on expressing one's power was most highly correlated with the AMORE *Power* subscale; Hill, 1997b, 2002, 2016).

The AMORE subscales have been shown to correlate with differences in various aspects of sexual behavior and contraception use (Hill, 2016; Hill & Preston, 1996). The subscales also correlate with attraction to a potential partner in a situation in which participants believed they were involved in a dating service opportunity (Hill, 2005, 2017). Many of the AMORE sub-scales correlate as predicted with attachment anxiety (Davis, Shaver, & Vernon, 2004; Schachner & Shaver, 2004). Finally, relationship threat (Birnbaum, Weisberg, & Simpson, 2010) and relationship conflict (Birnbaum, Mikulincer, & Austerlitz, 2013) both

affect reports of many of the sexual motives in theoretically meaningful ways.

With respect to specific subscales, the *Valued by Partner* and *Value for Partner* subscales are related to greater sexual satisfaction, relationship satisfaction, and relationship commitment among couples involved in romantic relationships (Hill, 1997a), as well as to changes in satisfaction and commitment over time (Hill, 1998). The *Expression of Power* subscale and the *Experience of Partner's Power* subscale are correlated with a measure of the tendency to explicitly link consensual sex with power-related roles of dominance versus submission (Chapleau & Oswald, 2010). Further, the *Expression of Power* subscale is associated with greater sexual coercion perpetrations for both women and men (Brousseau, Hébert, & Bergeron, 2012). Scores on the *Expression of Power* and the *Experience of Partner's Power* subscales likewise differ in theoretically predictable ways between gay men who identify as tops versus bottoms (Xu & Zheng, 2018).

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Exhibit

Affective and Motivational Orientation Related to Erotic Arousal

Please be extremely honest and think about yourself very carefully when responding to each statement!

There are no right or wrong answers.

This questionnaire asks you about reasons that you typically experience sexual feelings or that you become interested in sexual issues or behaviors. When you experience these feelings or interests, you may or may not always act on those feelings. "Sex," "having sex," or "sexual activity" can include sexual behavior with another person (e.g., your spouse or lover), as well as sexual behavior by yourself (e.g., masturbation, viewing or reading erotic materials). "Partner" can refer to either your spouse or regular romantic partner or any individual with whom you have sex. If you have never had sex or are not currently involved sexually with anyone, respond to the statements below like you think you would feel if you were involved in a sexual relationship or were sexually active.

Not all reasons for being interested in sexual issues or sexual behavior may be listed below. Many of the reasons included may not describe you well at all. If this is the case, please indicate that they are not true for you when rating them.

If a particular statement describes your typical reaction or feelings well, indicate that it is "Completely True" by filling in the letter "E" on the computer sheet. If a particular statement does not describe you well or is opposite of the way you feel, indicate that it is "Not at all True" by filling in the letter "A" on the computer sheet. Of course, you may choose any letter in between A and E to indicate the degree to which the statement describes you or not.

Please use the rating scale below to indicate how true or descriptive each of following statements is for you:

	A Not at all True	B	C Moderately True	D	E Completely True
1. Often when I need to feel loved, I have the desire to relate to my partner sexually because sexual intimacy really makes me feel warm and cared for.	○	○	○	○	○
2. I enjoy having sex most intensely when I know that it will lift my partner's spirits and improve his or her outlook on life.	○	○	○	○	○
3. When bad or frustrating things happen to me, many times I feel like engaging in sexual fantasy or doing something sexual to try to get to feeling better.	○	○	○	○	○
4. Sex is important to me largely for reproductive reasons.	○	○	○	○	○
5. Sexual activities and fantasies are most stimulating when my partner seems extremely self-assured and demanding during sex.	○	○	○	○	○
6. I find that I often feel a sense of superiority and power when I am expressing myself sexually.	○	○	○	○	○
7. One of the most exciting aspects of sex is the sense of power I feel in controlling the sexual pleasure and stimulation my partner experiences.	○	○	○	○	○
8. Often while I am engaging in sex or fantasy, the idea that children might result from sexual behavior is extremely arousing.	○	○	○	○	○
9. Frequently, when I want to feel that I am cared for and that someone is concerned about me, relating to my partner sexually is one of the most satisfying ways to do so.	○	○	○	○	○
10. Often the most pleasurable sex I have is when it helps my partner forget about his or her problems and enjoy life a little more.	○	○	○	○	○
11. I find sexual behavior and sexual fantasy most exciting when I can feel forceful and dominant with my partner.	○	○	○	○	○
12. Thinking about sex or engaging in sex sometimes seems to help me keep on going when things get rough.	○	○	○	○	○
13. It is frequently very arousing when my partner gets very forceful and aggressive during sex.	○	○	○	○	○
14. I frequently want to have sex with my partner when I need him or her to notice me and appreciate me.	○	○	○	○	○
15. I especially enjoy sex when my partner and I are trying to have a baby.	○	○	○	○	○
16. Often engaging in sex with my partner makes me feel like I have established myself as a force to be reckoned with.	○	○	○	○	○
17. A major reason I enjoy having sex with my partner is because I can communicate how much I care for and value him or her.	○	○	○	○	○
18. The sensations of physical pleasure and release are major reasons that sexual activity and fantasy are so important to me.	○	○	○	○	○
19. Sex and sexual fantasies are most exciting when I feel like my partner has totally overpowered me and has taken complete control.	○	○	○	○	○
20. When I am going through difficult times, I can start feeling better simply by engaging in some type of sexual fantasy or behavior.	○	○	○	○	○

21. The idea of having children is not very significant in my feelings about why sexual activity is important to me.	○	○	○	○	○
22. In many ways, I think engaging in sex and sexual fantasy are some of the most exciting and satisfying activities I can experience.	○	○	○	○	○
23. Many times it is extremely thrilling when my partner takes complete charge and begins to tell me what to do during sex.	○	○	○	○	○
24. I really value sexual activity as a way of enjoying myself and adding an element of adventure to my life.	○	○	○	○	○
25. Often I have a real need to feel dominated and possessed by my partner while we are engaged in sex or sexual fantasy.	○	○	○	○	○
26. One of the best ways of feeling like an important part of my partner's life is by relating to him or her sexually.	○	○	○	○	○
27. I find that thinking about or engaging in sexual activity can frequently help me get through unpleasant times in my life.	○	○	○	○	○
28. I often feel like fantasizing about sex or expressing myself sexually when life isn't going very well and I want to feel better about myself.	○	○	○	○	○
29. Engaging in sexual activity is a very important way for me to experience and appreciate the personal strength and forcefulness that my partner is capable of.	○	○	○	○	○
30. I find it extremely exciting to be playful and to have fun when I am expressing myself sexually.	○	○	○	○	○
31. Thinking about sex or engaging in sexual behavior can frequently be a source of relief from stress and pressure for me.	○	○	○	○	○
32. I would prefer to have sex primarily when I am interested in having a child.	○	○	○	○	○
33. Often when my partner is feeling down on life or is unhappy about something, I like to try to make him or her feel better by sharing intimacy together sexually.	○	○	○	○	○
34. The experience of sexual tension and energy are in many ways the most thrilling and important aspects of sexual activity and fantasy.	○	○	○	○	○
35. I often feel like having sex with my partner when I need to feel understood and when I want to relate to him or her on a one-to-one level.	○	○	○	○	○
36. When I need to feel a sense of belongingness and connectedness, having sex with my partner is really an important way of relating to him or her.	○	○	○	○	○
37. Doing something sexual often seems to greatly improve my outlook on life when nothing seems to be going right.	○	○	○	○	○
38. I frequently feel like expressing my need for emotional closeness and intimacy by engaging in sexual behavior or fantasy with my sexual partner.	○	○	○	○	○
39. Many times when I am feeling unhappy or depressed, thinking about sex or engaging in sexual activity will make me feel better.	○	○	○	○	○
40. When things are not going well, thinking about sex or doing something sexual is often very uplifting for me and helps me to forget about my problems for a while.	○	○	○	○	○
41. Engaging in sexual activity is very important to me as a means of feeling powerful and charismatic.	○	○	○	○	○
42. One of the main reasons I am interested in sex is for the purpose of having children.	○	○	○	○	○

43.	The sense of emotional bonding with my partner during sexual intercourse is an important way of feeling close to him or her.	○	○	○	○	○
44.	One of the most satisfying aspects of engaging in sex is expressing the intensity of my feelings for my partner while we are having sex.	○	○	○	○	○
45.	I often have a strong need to fantasize about sex or to do something sexual when I feel upset or unhappy.	○	○	○	○	○
46.	I really enjoy having sex as a way of exerting dominance and control over my partner.	○	○	○	○	○
47.	I often find it a real turn-on when my partner takes charge and becomes authoritative during sexual activity or fantasy.	○	○	○	○	○
48.	I am often very excited by the sense of power that I feel I have over my partner when I am sexually attractive to him or her.	○	○	○	○	○
49.	Being able to experience my partner's physical excitement and sexual release is incredibly thrilling and stimulating for me.	○	○	○	○	○
50.	I find it very exciting when my partner becomes very demanding and urgent during sex and sexual fantasy, as if he or she needs to possess me completely.	○	○	○	○	○
51.	I frequently become very aroused when I sense that my partner is excited by controlling and directing our sexual activity or fantasy.	○	○	○	○	○
52.	I frequently want to have sex with my partner because I know how much he or she enjoys it and how good it makes my partner feel as a person.	○	○	○	○	○
53.	Expressing myself sexually generally makes me feel personally strong and in control of things.	○	○	○	○	○
54.	I am especially excited by the feeling of domination and being controlled by my partner during sex and sexual fantasy.	○	○	○	○	○
55.	One of the most satisfying features of sex is when my partner really seems to need the love and tenderness it conveys.	○	○	○	○	○
56.	Often the sense of power that I have over my sexual partner can be extremely exhilarating	○	○	○	○	○
57.	I find it very rewarding when I can help my partner get through rough times by showing how much I care and being sexually intimate with him or her.	○	○	○	○	○
58.	I frequently find it quite arousing to be very directive and controlling while having sex with my partner.	○	○	○	○	○
59.	Sexual intercourse is important in creating a great deal of emotional closeness in my relationship with my partner.	○	○	○	○	○
60.	Sharing affection and love during sexual intercourse is one of the most intense and rewarding ways of expressing my concern for my partner.	○	○	○	○	○
61.	The sense of emotional closeness I experience from having sex with my partner is one of the most satisfying ways I know of feeling valued.	○	○	○	○	○
62.	To me, an extremely rewarding aspect of having sex is that it can make my partner feel good about himself or herself	○	○	○	○	○

Implicit Affective and Motivational Orientation Related to Erotic Arousal Questionnaire

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The Implicit Affective and Motivational Orientation Related to Erotic Arousal Questionnaire (Implicit AMORE) is an indirect measure of individual differences in eight nonconscious sexual motives proposed within a construct of intrinsic sexual motivation (Hill, 2016). The measure is indirect in that it is based on responses which respondents are not aware reflect the construct being measured, such that they are implicit responses. The Implicit AMORE is proposed to be a counterpart to the self-report AMORE questionnaire (Hill & Preston, 1996), which measures eight explicit (conscious) sexual motives corresponding to the eight implicit sexual motives. The eight sexual motives are the desire to (a) feel valued by one's partner, (b) express value for one's partner, (c) obtain relief from negative emotional states, (d) provide nurturance and comfort to one's partner, (e) enhance one's power, (f) experience the power of one's partner, (g) experience sensuality and physical pleasure, and (h) procreate.

Development

Measurement of the implicit sexual motives is based on the Affect Misattribution Procedure (AMP; Payne, Cheng, Govorun, and Stewart, 2005). The procedure involves presenting an object that evokes an emotional response in individuals; in the current instance, images portray female–male couples engaged in sexual behavior (the measure was developed employing heterosexually identified participants), or female–male couples not engaged in sexual behavior, but conveying a sense of being motivated to have children for the Procreation motive. Random Chinese-language characters are presented immediately following the picture. This is typical in AMP research, because the Chinese characters serve as an ambiguous object, having no meaning for non-Chinese-speaking individuals. Respondents are explicitly instructed not to let the first object (the picture of sexual behavior) influence their reaction to the second object (the Chinese character). They are then asked to indicate whether they feel the second object is pleasant or unpleasant. Because individuals are not able to control automatic processes once they have been activated (the emotional arousal to the first stimulus), the implicit feeling will continue to be in effect when individuals evaluate the second, neutral stimulus.

Images of female–male couples engaged in sexual behavior for the implicit sexual motive measure were selected to represent one of the sexual motive dimensions. The exceptions were images representing the Procreation motive, which were selected to avoid a hedonic tone (Hill, 1997, 2002; Hill & Preston, 1996). To make assignment to motive dimension apparent, words conveying the essence of each motive (e.g., "show value for partner," "take charge of partner") were superimposed on the images in a way that did not obscure the couple. The pleasantness ratings of randomly selected Chinese characters following the 44 sexual images constitute the implicit AMORE. Two sets of confirmatory factor analyses ($n = 800$ and $n = 971$) supported the proposal that the AMP pleasantness ratings assess eight separate dimensions as predicted (Hill, 2016). The images employed in the Implicit AMORE, as well as the questionnaire document employed to administer the measure in MediaLab, may be obtained from Craig Hill at hillc@pfw.edu.

Response Mode and Timing

The measurement process consists of randomly presenting each motive-relevant image for 2 seconds prior to a blank gray screen presented for 1 second, and then presenting a randomly selected Chinese character. Respondents rate the Chinese character in terms of whether each is more or less pleasant than average (Payne et al., 2005), with the response options of 1 (*unpleasant*), 2 (*slightly unpleasant*), 3 (*slightly pleasant*), and 4 (*pleasant*). The typical amount of time required to complete the questionnaire is approximately 15-20 minutes.

Scoring

The Implicit AMORE consists of eight subscales measuring each of the motive dimensions. Responses to the Chinese characters following each image are converted to numeric values in the following way: A = 1, B = 2, C = 3, and D = 4. Values for items on each subscale are added together to create a total subscale score. The images belonging to each subscale are identified by the names assigned to the images, for example *valuedby01, valuedby02*, etc.

Reliability

Internal consistency coefficients (alphas) for the subscales have ranged from .71 to .84 across several samples, although the alphas for three of the scales were around .60 in a single sample (Hill, 2016).

Validity

Correlations among the implicit AMORE scales indicate that the scales measure substantially related, but not identical, constructs (Hill, 2016). Correlations of implicit sexual

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motive scales with the conceptual counterpart explicit motive scale range between .10 and .31, with an average of .17; all were positive. The pattern of correlation therefore is extremely similar to the average in previous studies related to implicit measures of personality traits. The finding of a level of positive correlations between conceptually analogous motive scales—yet a much smaller proportion of correlations among non-analogous scales—indicates that the implicit scales were measuring constructs meaningfully related to the relevant explicit construct.

The duration of viewing eroticia in a task in which participants are asked to rate the pleasantness of the images (Hill, 2016) can serve as an implicit measure of sexual interest because the individuals are unaware of the actual response that is being assessed. For women, the sexual motive scales were positively associated with their average duration of viewing erotica in such a task, but viewing duration was not related to implicit sexual motive scores for men. Also, as expected, scores on the explicit motive scales were not consistently correlated with viewing time. Moreover, all implicit motive scales were substantially correlated with ratings of erotic image pleasantness. The lack of correlation of the implicit motive scales with ratings of the likelihood of engaging in sexual behavior in role-played scenarios is consistent with the proposal that implicit motives are not correlated with self-report measures which largely assess consciously controlled judgments.

All implicit sexual motive and explicit sexual motive scales were independently associated with a measure of chronic sexual desire (Hill, 2016). Such relationships support the proposal that all of the scales—implicit and explicit—measure interest in engaging in sexual expression and behavior, a motivational aspect of sexuality. Moreover, self-reports of many aspects of sexual behavior (e.g., penile–vaginal, oral–genital) were associated with the measures of implicit sexual motives for both women and men (excluding the procreation motive), independently of the explicit motives. Finally, the implicit motive scales exhibited a highly consistent pattern of association with measures of attraction to a bogus potential romantic or sexual partner (Hill, Gunderson, Haag, & Merkler, 2014).

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The Need for Sexual Intimacy Scale

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The Need for Sexual Intimacy Scale (NSIS) was developed to look specifically at motivations for sexual intimacy, including needs for sex, affiliation, and dominance. It is intended to compliment existing sexuality measures that focus on sexual desires and drives for sexual intercourse, yet addresses additional aspects of sexual motivations often overlooked, such as affiliation and dominance. The NSIS may be used as part of a larger battery of assessment scales addressing sexual health, as individuals with strong sexual intimacy motivations are more likely to engage in risky sexual behaviors that may lead to increased exposure to sexually transmitted diseases; such individuals could then be targeted for primary prevention efforts. The scale may also be used with general or college populations for research on issues surrounding intimate and close relationships.

Development

The scale consists of 22 items divided into three subscales; *Need for Sex, Need for Affiliation*, and *Need for Dominance*. These needs come from Murray (1938) and were chosen based on their relationship with issues surrounding sexual intimacy. According to Murray (1938), the need for sex addresses the formation and progression of sexual relationships and sexual intercourse. The need for affiliation concerns one's need for affection and to be

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close to others, while the need for dominance focuses on controlling and influencing one's environment (and those in the environment) through persuasion and seduction. Of the 22 items in the NSIS, eight address *Need for Sex*, nine address *Need for Affiliation*, and five refer to the *Need for Dominance*.

The compilation of the 22 items and three subscales was determined through exploratory factor analyses utilizing principal axis factoring and confirmed through confirmatory factor analysis (Marelich & Lundquist, 2008). Further validation efforts (Marelich, Shelton, & Granfield, 2013) confirmed the factor structure utilizing polychoric correlations to account for the scale response structure, and a second-order factor analysis provides evidence that the three subscales are the result of a broader Need for Sexual Intimacy construct. The second-order factor is also suggestive that a total score measure is viable.

Response Mode and Timing

The items are rated on a 5-point scale, with responses ranging from 1 (*disagree definitely*) to 5 (*agree definitely*). The 22-item measure requires 5 minutes to complete.

Scoring

A separate score is generated for each of the three subscales. Scores for items corresponding to a given subscale are summed and divided by the total number of items in that subscale to produce a mean score. Items 1–8 correspond to the *Need for Sex*, Items 9–17 correspond to the *Need for Affiliation*, and Items 18–22 correspond to the *Need for Dominance*. A total score may be derived by using all of the items. Item 14 should be reverse coded. For each subscale, higher mean scores indicate higher need. Items when originally assessed were randomly arranged across subscales, which remains the current recommendation when using the measure.

Reliability

Principal axis factoring was performed on the final 22 items utilizing an oblique rotation to allow the resulting factors to correlate. The number of factors was determined through a parallel analysis, scree plot inspection, and the interpretability of the factor solution. All items had sufficient loadings on at least one of the three factors, and two of the factors (sex and dominance) correlated at .39. The three factors reflect the three needs subscales.

Internal consistency reliabilities based on Cronbach's alpha were .88 for *Need for Sex*, .82 for *Need for Affiliation*, and .74 for *Need for Dominance* (Marelich & Lundquist, 2008). Other validation work (Marelich et al., 2013) showed reliabilities based on *rho* of .88, .76, and .85 for *Need for Sex, Need for Dominance*, and *Need for Affiliation* (respectively), and alphas ranging from .76 to .88. Applied research using the subscales show reliabilities ranging from .79 to .84 (Brewer, Abell, & Lyons, 2016; Struckman-Johnson, Gaster, & Struckman-Johnson, 2014; Struckman-Johnson, Gaster, Struckman-Johnson, Johnson, & May-Shinagle, 2015). Test–retest reliabilities are not available.

Validity

Construct validity (i.e., convergent and criterion assessments) was evaluated looking at subscale associations with measures addressing sexuality, sexual desire, sexual communication and behaviors, and attitudes towards relationships. Validity findings from the subscales noted below and are taken from the primarily validation efforts (Marelich & Lundquist, 2008; Marelich et al., 2013) unless otherwise noted.

Individuals higher in need for sex report a greater number of lifetime sexual partners and one-night stands, are more likely to dominate their partners sexually, report using condoms less often, and used intoxicants during sexual encounters more often. They also had a harder time talking with their partners about safe sex, were more likely to lie about HIV testing, and more likely to report that the most important aspect of a relationship was sex. Those with a higher need for sex are more likely to report an unrestricted sexual orientation, have more positive attitudes toward "friends with benefits" sexual relationships, and tend to exhibit a game-playing love style. Men tended to report a higher need for sex compared to women. Brewer et al. (2016) showed in a sample of heterosexual women that those higher in need for sex are more likely to score higher in Machiavellianism and more likely to report faking an orgasm in order to manipulate and deceive their partners. For both men and women, those higher in need for sex have positive attitudes toward polyamory (Johnson, Giuliano, Herselman, & Hutzler, 2015), and have an increased intent to practice risky-driving behaviors (i.e., sex while driving; Struckman-Johnson et al., 2014).

Individuals higher in need for affiliation report being consumed with thoughts of their partners more frequently, were less likely to misinform their partners about being HIV tested, were more truthful when revealing information about the number of sexual partners they have had, and report that being in a relationship was something they need. Those with a higher need for affiliation tend to have negative attitudes and behaviors toward casual sexual experiences, report providing more emotional support, and exhibit more affiliative oriented love-styles such as Agape and Pragma. Women report a higher need for affiliation than men. In a sample of heterosexual women, those higher

in need for affiliation scored lower on Machiavellianism (Brewer et al., 2016). Both men and women who had a higher need for affiliation also report greater cell-phone dependency and greater need to have many friends (Struckman-Johnson et al., 2015).

Individuals higher in need for dominance showed a preference for dominating partners in a sexual manner. In addition, they report using condoms less often, being in circumstances where condoms were not available more often, and were less likely to be rejected by a sexual partner for sex. Individuals higher on this measure were more likely to ask partners about their past sexual experiences, report that being in a relationship is something they needed, and that sex was an important aspect of relationships. Those with a more domineering personality style reported a greater need for dominance. Both a game-playing love style and mania (possessive/dependent) were positively associated with need for dominance. No gender differences were noted. In a sample of heterosexual women, those higher in need for dominance were more likely to score higher in Machiavellianism and more likely to report faking an orgasm in order to manipulate and deceive their partners (Brewer et al., 2016).

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Exhibit

Need for Sexual Intimacy Scale

The next few items address things we may "need" in life. Some say we "need" many things in order to survive (e.g., food, shelter, etc.). Below we have presented a series of items and would like you to rate each item as to how much you agree or disagree with them as things you may "need." The term "partner" below refers to a sexual partner (e.g., dating partner, boyfriend/girlfriend, long-term partner/spouse).

I need …

	1 Disagree Definitely	2	3	4	5 Agree Definitely
1. …to have more sex.	○	○	○	○	○
2. …sex every day.	○	○	○	○	○
3. …to have an orgasm every day.	○	○	○	○	○
4. …to let myself go sexually with someone.	○	○	○	○	○
5. …sex every couple of days.	○	○	○	○	○
6. …someone who is "great in bed."	○	○	○	○	○
7. …sex with a lot of partners.	○	○	○	○	○
8. …to take control of my partner when we are intimate.	○	○	○	○	○
9. …a partner who loves me.	○	○	○	○	○
10. …somebody to love.	○	○	○	○	○
11. …companionship.	○	○	○	○	○
12. …a companion in life.	○	○	○	○	○
13. …complete trust in the people I am intimate with.	○	○	○	○	○
14. …nobody special in my life.	○	○	○	○	○
15. …somebody to hold my hand.	○	○	○	○	○
16. …a few really good friends.	○	○	○	○	○
17. …someone to sleep next to me.	○	○	○	○	○

18. …my partner to tell me where they are at all times.	○	○	○	○	○
19. …control over my partner.	○	○	○	○	○
20. …my partner to give me what I want (such as financial support, clothes, a car).	○	○	○	○	○
21. …a partner I can manipulate.	○	○	○	○	○
22. …the ability to order to have sex with me if I want to.	○	○	○	○	○

The Why Have Sex? Questionnaire

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Based on a series of studies, Meston and Buss (2007) documented that humans have sex for a large number of diverse reasons. The Why Have Sex? Questionnaire (YSEX?; Meston & Buss, 2007) includes 142 reasons for having sex and measures how often respondents report that these reasons motivate them to engage in sexual activity (defined as sexual intercourse).

Development

Four hundred and forty-four participants ($n = 241$ women) were asked to list all of the reasons why they (or someone that they have known) have engaged in sexual intercourse in the past. A total of 715 items were generated and reviewed by the authors; duplicates were removed, as were responses with minor differences in wording. This process resulted in 237 distinct reasons, which were then presented as brief statements and listed in a questionnaire format (Meston & Buss, 2007).

A second sample of undergraduate students ($N = 1{,}549$, $n = 1{,}046$ women) was then recruited to complete the questionnaire. Gender-specific exploratory principal components analyses (PCA) were conducted on the 237 items. The sample was mostly Caucasian, but included individuals of diverse religious affiliations. The analyses identified four factors, which accounted for 42 percent of the total item variance in men and 35 percent in women. The factors were labeled as Physical Reasons, Goal Attainment Reasons, Emotional Reasons, and Insecurity Reasons.

To determine if the general pattern of factors was comparable for men and women, Meston and Buss calculated coefficients of comparability (Nunnally, 1978). Correlations among factors derived separately for men and women for Physical Reasons, Goal Attainment Reasons, Emotional Reasons, and Insecurity Reasons, respectively, were: $r(44) = .97$, $r(46) = .95$, $r(20) = .96$, $r(31) = .90$, all ps $< .001$. Given the similarities in the factor structures, another PCA was conducted on the entire sample. The four factors accounted for 37 percent of the total item variance, and the pattern of item loadings corresponded closely to the expected factors.

The heterogeneity of the items that loaded onto each of the four factors led to additional PCAs, which established relatively homogenous subfactors within each factor. The best fitting solutions were four factors that accounted for 47 percent of the total item variance in Physical Reasons (*Stress Reduction, Pleasure, Physical Desirability*, and *Experience Seeking*), four factors that accounted for 47 percent of the variance in Goal Attainment Reasons (*Resources, Social Status, Revenge*, and *Utilitarian*), two factors that accounted for 51 percent of the variance in Emotional Reasons (*Love and Commitment* and *Expression*), and three factors that accounted for 44 percent of the variance in Insecurity Reasons (*Self-Esteem Boost, Duty/Pressure*, and *Mate Guarding*). For each of these subfactors, composites were formed by calculating the mean of the items. Certain items were removed if their factor loadings were <.30, if they were gender specific, or if they were conceptually similar to other items within the composite. This left 142 items remaining.

Response Mode and Timing

The YSEX? can be completed in about 15 minutes on a computer or with pen and paper. Participants indicate how frequently each of the 142 items has led them to have sex in the past on a five-point scale, from *none of my sexual experiences* to *all of my sexual experiences*. If respondents

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have not had sex in the past, they are asked to indicate the likelihood that each of the following reasons would lead them to have sex.

Scoring

Factor scores are computed by adding the scores of the individual items that comprise each of the subfactors within a given factor. Subfactor scores are determined by adding the scores of the individual items that load onto the subfactor. The first factor, Physical Reasons, consists of Items 1–45 (*Stress Reduction* = Items 1–12, *Pleasure* = Items 13–20, *Physical Desirability* = Items 21–30, *Experience Seeking* = Items 31–45). The second factor, Goal Attainment, includes Items 46–91 (*Resources* = Items 46–60, *Social Status* = Items 61–71, *Revenge* = Items 72–81, *Utilitarian* = Items 82–91). Emotional Reasons, the third factor, consists of Items 92–111 (*Love and Commitment* = Items 92–104, *Expression* = Items 105–111). The fourth factor, Insecurity, encompasses the remaining items (*Self-Esteem Boost* = Items 112–120, *Duty/Pressure* = Items 121–133, *Mate Guarding* = Items 134–142). Higher scores indicate stronger motivation to have sex for reasons specific to that domain.

Reliability

Reliability analyses were conducted on the condensed 142-item questionnaire for each of the subfactors and factor composite scores by gender and for the total sample. In the male sample, the female sample, and the total sample, Cronbach's alpha reliability values exceeded .85 for each of the four factors. With respect to the subfactors, Cronbach's alphas ranged from alpha = .75 to .83 in the combined sample, from alpha = .77 to .89 in the male sample, and from alpha = .70 to .86 in the female sample. Values in the .7 range suggest acceptable internal consistency, and values in the .8 range suggest good internal consistency. The reliability of this factor structure has also been demonstrated in a sample of women with same-sex attraction (Armstrong & Reissing, 2015). Other measures of reliability, such as test–retest reliability, have yet to be established.

Validity

The YSEX? demonstrated discriminant and convergent validity using measures that assessed sociosexual orientation (i.e., willingness to engage in casual or short-term sexual activity without commitment) and the "Big Five" personality dimensions. Providing discriminant validity, the *Love and Commitment* and *Expression* subfactors were unrelated to sociosexual orientation in men. Neither Extraversion nor Openness were significantly related to any of the subfactor or total composite scores in women (with one exception for *Pleasure* and Extraversion); for men, extraversion was not significantly related to any of the subfactor or total factor composite scores. Providing convergent validity, all Physical subfactors and the composite factor correlated positively with sociosexual orientation in women ($rs > .24$). Also among women, all Insecurity subfactors and the composite factor were positively associated with Neuroticism ($rs > .13$).

Summary

The YSEX? questionnaire is the most comprehensive tool to date for assessing human sexual motivation, or the many and diverse reasons for which humans have sex. The measure has recently been used to assess motives among individuals who identify with different sexual orientation categories, individuals in different types of relationships (e.g., short-term, long-term), and women with sexual problems (for a review, see Meston & Stanton, 2017). Examining cultural differences in motives and clinical implications of these motives remain critical areas for future research.

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Exhibit

The Why Have Sex Questionnaire (YSEX?)

People have sex (i.e., sexual intercourse) for many different reasons. Below is a list of some of these reasons. Please indicate how frequently each of the following reasons led you to have sex in the past. For example, if about half of the time you engaged in sexual intercourse you did so because you were bored, then you would circle "3" beside question 4. If you have not had sex in the past, use the following scale to indicate what the likelihood that each of the following reasons would lead you to have sex.

I have had sex in the past because …

		1 None of my sexual experiences	2 A few of my sexual experiences	3 Some of my sexual experiences	4 Many of my sexual experiences	5 All of my sexual experiences
1.	I was frustrated and needed relief.	○	○	○	○	○
2.	I wanted to release anxiety/stress.	○	○	○	○	○
3.	I wanted to release tension.	○	○	○	○	○
4.	I was bored.	○	○	○	○	○
5.	It seemed like good exercise.	○	○	○	○	○
6.	I thought it would relax me.	○	○	○	○	○
7.	I'm addicted to sex.	○	○	○	○	○
8.	It would allow me to "get sex out of my system" so that I could focus on other things.	○	○	○	○	○
9.	I am a sex addict.	○	○	○	○	○
10.	I thought it would make me feel healthy.	○	○	○	○	○
11.	I hadn't had sex for a while.	○	○	○	○	○
12.	I wanted to satisfy a compulsion.	○	○	○	○	○
13.	It feels good.	○	○	○	○	○
14.	I wanted to experience the physical pleasure.	○	○	○	○	○
15.	I was "horny."	○	○	○	○	○
16.	It's fun.	○	○	○	○	○
17.	I wanted the pure pleasure.	○	○	○	○	○
18.	I wanted to achieve an orgasm.	○	○	○	○	○
19.	It's exciting, adventurous.	○	○	○	○	○
20.	I was "in the heat of the moment."	○	○	○	○	○
21.	The person had an attractive face.	○	○	○	○	○
22.	The person had a desirable body.	○	○	○	○	○
23.	The person had beautiful eyes.	○	○	○	○	○
24.	The person smelled nice.	○	○	○	○	○
25.	The person's physical appearance turned me on.	○	○	○	○	○
26.	I saw the person naked and could not resist.	○	○	○	○	○
27.	The person was a good dancer.	○	○	○	○	○
28.	The person was too physically attractive to resist.	○	○	○	○	○

29.	The person wore revealing clothes.	○	○	○	○	○
30.	The person was too "hot" (sexy) to resist.	○	○	○	○	○
31.	I was curious about sex.	○	○	○	○	○
32.	I was curious about my sexual abilities.	○	○	○	○	○
33.	I wanted the experience.	○	○	○	○	○
34.	I wanted to experiment with new experiences.	○	○	○	○	○
35.	I wanted to see what all the fuss is about.	○	○	○	○	○
36.	I wanted to see what it would be like to have sex with another person.	○	○	○	○	○
37.	I wanted the adventure/excitement.	○	○	○	○	○
38.	I wanted to improve my sexual skills.	○	○	○	○	○
39.	I was curious about what the person was like in bed.	○	○	○	○	○
40.	I wanted to lose my inhibitions.	○	○	○	○	○
41.	I wanted to get the most out of life.	○	○	○	○	○
42.	I wanted to try out new sexual techniques or positions.	○	○	○	○	○
43.	The opportunity presented itself.	○	○	○	○	○
44.	I wanted to act out a fantasy.	○	○	○	○	○
45.	I wanted to see whether sex with a different partner would feel different or better.	○	○	○	○	○
46.	I wanted to get a raise.	○	○	○	○	○
47.	I wanted to punish myself.	○	○	○	○	○
48.	I wanted to get a job.	○	○	○	○	○
49.	I wanted to hurt/ humiliate the person.	○	○	○	○	○
50.	I wanted to get a promotion.	○	○	○	○	○
51.	I wanted to give someone else a sexually transmitted disease (e.g., herpes, AIDS).	○	○	○	○	○
52.	Someone offered me money to do it.	○	○	○	○	○
53.	I wanted to feel closer to God.	○	○	○	○	○
54.	I wanted to make money.	○	○	○	○	○

55.	I wanted to have a child.	○	○	○	○	○
56.	I wanted to reproduce.	○	○	○	○	○
57.	It was an initiation rite to a club or organization.	○	○	○	○	○
58.	The person offered me drugs for doing it.	○	○	○	○	○
59.	I wanted to end the relationship.	○	○	○	○	○
60.	I wanted to be used or degraded.	○	○	○	○	○
61.	I wanted to be popular.	○	○	○	○	○
62.	I wanted to enhance my reputation.	○	○	○	○	○
63.	I wanted to have more sex than my friends.	○	○	○	○	○
64.	I was competing with someone else to "get the person."	○	○	○	○	○
65.	It would damage my reputation if I said "no."	○	○	○	○	○
66.	The person was famous and I wanted to be able to say I had sex with him/her.	○	○	○	○	○
67.	I thought it would boost my social status.	○	○	○	○	○
68.	My friends pressured me into it.	○	○	○	○	○
69.	It was a favor to someone.	○	○	○	○	○
70.	Someone dared me.	○	○	○	○	○
71.	I wanted to impress friends.	○	○	○	○	○
72.	I wanted to get back at my partner for having cheated on me.	○	○	○	○	○
73.	I was mad at my partner so I had sex with someone else.	○	○	○	○	○
74.	I wanted to get even with someone.	○	○	○	○	○
75.	I wanted to even the score with a cheating partner.	○	○	○	○	○
76.	I wanted to make someone else jealous.	○	○	○	○	○
77.	I wanted to break up rival's relationship by having sex with his/her partner.	○	○	○	○	○
78.	I was on the "rebound" from another relationship.	○	○	○	○	○
79.	I wanted to make someone else jealous.	○	○	○	○	○

80.	I wanted to breakup another's relationship.	○	○	○	○	○
81.	I wanted to hurt an enemy.	○	○	○	○	○
82.	I wanted to get out of doing something.	○	○	○	○	○
83.	I wanted to burn calories.	○	○	○	○	○
84.	I wanted to keep warm.	○	○	○	○	○
85.	The person had taken me out for an expensive dinner.	○	○	○	○	○
86.	I wanted to get rid of a headache.	○	○	○	○	○
87.	I wanted to change the topic of conversation.	○	○	○	○	○
88.	I thought it would help me to fall asleep.	○	○	○	○	○
89.	I wanted to become more focused on work – sexual thoughts are distracting.	○	○	○	○	○
90.	I wanted to get a favor from someone.	○	○	○	○	○
91.	I wanted to defy my parents.	○	○	○	○	○
92.	I wanted to feel connected to the person.	○	○	○	○	○
93.	I wanted to increase the emotional bond by having sex.	○	○	○	○	○
94.	I wanted to communicate at a "deeper" level.	○	○	○	○	○
95.	I wanted to express my love for the person.	○	○	○	○	○
96.	I wanted to show my affection to the person.	○	○	○	○	○
97.	I wanted to intensify my relationship.	○	○	○	○	○
98.	I desired emotional closeness (i.e., intimacy).	○	○	○	○	○
99.	I wanted to become one with another person.	○	○	○	○	○
100.	It seemed like the natural next step in my relationship.	○	○	○	○	○
101.	I realized I was in love.	○	○	○	○	○
102.	It seemed like the natural next step in the relationship.	○	○	○	○	○
103.	I wanted to get a partner to express love.	○	○	○	○	○
104.	I wanted the person to feel good about himself/herself.	○	○	○	○	○

105.	I wanted to welcome someone home.	○	○	○	○	○
106.	I wanted to say "I'm sorry."	○	○	○	○	○
107.	I wanted to say "thank you."	○	○	○	○	○
108.	I wanted to say "goodbye."	○	○	○	○	○
109.	I wanted to celebrate a birthday or anniversary or special occasion.	○	○	○	○	○
110.	I wanted to say "I've missed you."	○	○	○	○	○
111.	I wanted to lift my partner's spirits.	○	○	○	○	○
112.	I wanted to feel powerful.	○	○	○	○	○
113.	I wanted to make myself feel better about myself.	○	○	○	○	○
114.	I wanted to boost my self-esteem.	○	○	○	○	○
115.	I wanted to feel attractive.	○	○	○	○	○
116.	I wanted my partner to notice me.	○	○	○	○	○
117.	I wanted the attention.	○	○	○	○	○
118.	I wanted to "gain control" of the person.	○	○	○	○	○
119.	I wanted to manipulate him/her into doing something for me.	○	○	○	○	○
120.	I felt insecure.	○	○	○	○	○
121.	I didn't know how to say "no."	○	○	○	○	○
122.	I was pressured into doing it.	○	○	○	○	○
123.	I felt obligated to.	○	○	○	○	○
124.	I was verbally coerced into it.	○	○	○	○	○
125.	I felt like it was my duty.	○	○	○	○	○
126.	I wanted him/her to stop bugging me about sex.	○	○	○	○	○
127.	My partner kept insisting.	○	○	○	○	○
128.	I felt like I owed it to the person.	○	○	○	○	○
129.	I was physically forced to.	○	○	○	○	○
130.	It was expected of me.	○	○	○	○	○
131.	I felt guilty.	○	○	○	○	○
132.	I didn't want to disappoint the person.	○	○	○	○	○
133.	I wanted to be nice.	○	○	○	○	○
134.	I wanted to keep my partner from straying.	○	○	○	○	○
135.	I wanted to get my partner to stay with me.	○	○	○	○	○

136.	I wanted to decrease my partner's desire to have sex with someone else.	○	○	○	○	○
137.	I wanted to prevent a breakup.	○	○	○	○	○
138.	I was afraid my partner would have an affair if I didn't have sex with him/her.	○	○	○	○	○
139.	I wanted to ensure the relationship was "committed."	○	○	○	○	○
140.	I didn't want to "lose" the person.	○	○	○	○	○
141.	I wanted the person to love me.	○	○	○	○	○
142.	I thought it would help "trap" a new partner.	○	○	○	○	○

Motivations For and Against Sex Measure

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The measure includes the Motivations Against Sex Questionnaire (MASQ), which assesses motivations not to have sex in 3 domains: *Values, Health*, and *Not Ready* (Patrick, Maggs, Cooper, & Lee, 2011). The MASQ was designed to be used with the Sexual Motivations Measure—Revised (SMS-R) adapted from Cooper, Shapiro, and Powers (1998). The SMS-R assessed motivations to have sex in three domains: Enhancement, Intimacy, and Coping. Original development of the motivations for sex measure is reported in Cooper et al. (1998). Together, the MASQ and SMS-R are designed to be a multidimensional measure of adolescents' and young adults' motivations for and against sexual behavior.

Development

The SMS-R was adapted from the original Cooper et al. (1998) measure by changing the stem question so that students who have no sexual experience can reasonably answer it (i.e., changed from "select the response which best describes how often you personally have sex for each of these reasons," p. 1535). The MASQ items were created to reflect the three hypothesized constructs of Values, Health, and Not Ready based on previous literature.

Response Mode and Timing

The items have been administered via web-based surveys. There are a total of 24 items rated from 1 (*not at all important*) to 5 (*very important*). The MASQ uses the stem "Listed below are different reasons why people do not have sexual intercourse or take actions to minimize risks. How important is each of these reasons in influencing your decisions about whether or not to have sex?" to measure Values motivations, Health motivations, and Not Ready motivations. The SMS-R uses the stem of "Listed below are different reasons why people have sexual intercourse. How important is each of these reasons in influencing your decisions about whether or not to have sex?" to measure Enhancement motivations, Intimacy motivations, and Coping motivations. The measure is brief and takes only a few minutes to complete.

Scoring

The mean of relevant items for each subscale is used.

Specific items for the MASQ subcales are: *Values* (Items 2, 8, and 9), *Health* (Items 1, 3, and 7), and *Not Ready* (Items 4, 5, and 6).

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Specific items for the SMS-R are: *Enhancement* (Items 2, 6, 8, 10, and 14), *Intimacy* (Items 1, 5, 9, 11, and 13), and *Coping* (Items 3, 4, 7, 12, and 15).

Reliability

In the original sample (Patrick et al., 2011), exploratory and confirmatory factor analysis supported the six hypothesized factors and demonstrated consistent reliability across gender, race/ethnicity (White and Asian American), and lifetime sexual experience among recent high school graduates before starting their first year of university (N = 1,653; mean age = 17.99 years). Reliability was high for all subscales: *Values* motivations against sex (3 items; α = .91), *Health* motivations against sex (3 items; α = .80), *Not Ready* motivations against sex (3 items; α = .75), *Intimacy* motivations for sex (5 items; α = .94), *Enhancement* motivations for sex (5 items; α = .91), and *Coping* motivations for sex (5 items; α = .88; Patrick et al., 2011). In a different college student sample at a different university (N = 227), internal consistency of scales was also very good: *Values* (α = .87), *Health* (α = .80), *Not Ready* (α = .67), *Intimacy* (α = .92), *Enhancement* (α = .91), and *Coping* (α = .88; Patrick & Maggs, 2010). In a third university sample (N = 271), the scales were used and adapted to motivations specific to Spring Break sexual behavior, also with good reliability: *Values* (α = .91), *Health* (α = .88), *Not Ready* (α = .82), *Intimacy* (α = .98), *Enhancement* (α = .96), and *Coping* (α = .94; Patrick, Lee, & Neighbors, 2014).

Validity

In the original scale development sample, validity was examined by testing correlations and multivariable regression associations with measures of oral and penetrative sex, condom use, contraception, and alcohol use prior to sex. All subscales were associated with lifetime oral sex and lifetime penetrative sex in predicted directions. Specifically, *Enhancement, Intimacy*, and *Health* were positively associated with sexual behavior, and *Coping, Values*, and *Not Ready* were negatively related (Patrick et al., 2011). *Enhancement* and *Intimacy* were positively correlated with contraceptive use, and no subscales were associated with condom use. For alcohol use before sex, *Enhancement* was positively associated and *Intimacy* and *Not Ready* were negatively associated (Patrick et al., 2011). In a longitudinal analysis with the same sample, motivations for and against sex reported the summer before college entrance were associated with abstaining from or engaging in sex during the transition to college (Patrick & Lee, 2010).

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Exhibit

Motivations For and Against Sex Measure

Motivations Against Sex Questionnaire (MASQ)

Listed below are different reasons why people do not have sexual intercourse or take actions to minimize risks. How ***important*** is each of these reasons in *influencing your decisions about whether or not to have sex*?

	1 Not at all important	2	3	4	5 Very important
1. A desire to avoid pregnancy.	○	○	○	○	○
2. It's against my beliefs.	○	○	○	○	○
3. Fear of STDs (sexually transmitted diseases).	○	○	○	○	○
4. I am not in love with anyone.	○	○	○	○	○
5. I don't feel old enough.	○	○	○	○	○
6. Not ready for the commitment.	○	○	○	○	○
7. Want to avoid exposure to HIV/AIDS.	○	○	○	○	○
8. Moral/religious values.	○	○	○	○	○
9. Ethical principles.	○	○	○	○	○

Sexual Motivation Scale—Revised (SMS-R)

Listed below are different reasons why people have sexual intercourse. How ***important*** is each of these reasons in *influencing your decisions about whether or not to have sex?*

	1 Not at all important	2	3	4	5 Very important
1. To become more intimate with your partner.	○	○	○	○	○
2. Because it feels good.	○	○	○	○	○
3. To cope with upset feelings.	○	○	○	○	○
4. Because it would help you feel better when you're lonely.	○	○	○	○	○
5. To express love for your partner.	○	○	○	○	○
6. Because you feel "horny."	○	○	○	○	○
7. Because it would help you feel better when you're feeling low.	○	○	○	○	○
8. Just for the excitement of it.	○	○	○	○	○
9. To make an emotional connection with your partner.	○	○	○	○	○
10. Just for the thrill of it.	○	○	○	○	○
11. To become closer with your partner.	○	○	○	○	○
12. To help you deal with disappointment in your life.	○	○	○	○	○
13. To feel emotionally close to your partner.	○	○	○	○	○
14. To satisfy your sexual needs.	○	○	○	○	○
15. To cheer yourself up.	○	○	○	○	○

The Sexual Wanting Questionnaire

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Sexual activity is often classified as wanted or unwanted, reflecting a unidimensional, dichotomous model of sexual wanting. In reality, individuals' feelings often are more complex (Muehlenhard & Peterson, 2005). The Sexual Wanting Questionnaire (SWQ) measures sexual wanting, taking into account: (a) multiple levels of wanting rather than a dichotomy, acknowledging that sex can be wanted or unwanted to varying degrees; (b) multiple dimensions of wanting, acknowledging that sex can be wanted in some ways and unwanted in others; (c) an act–consequences distinction, acknowledging that wanting/not wanting a sexual act differs from wanting/not wanting its consequences; and (d) a wanting-consenting distinction, acknowledging that wanting/not wanting sex differs from consenting/not consenting to sex (Peterson & Muehlenhard, 2007).

The SWQ includes 106 items assessing respondents' reasons for wanting/not wanting a particular sexual experience. It assesses reasons for wanting/not wanting the sexual act itself, consequences of engaging in the act, and consequences of not engaging in the act. Items describe reasons related to sexual arousal, morals and values, situational characteristics, social status, fear of pregnancy and sexually transmitted infections, and relationship concerns.

Development

SWQ items were developed from themes identified in prior studies of individuals' reasons for wanting and not wanting sex (e.g., Muehlenhard & Cook, 1988; O'Sullivan & Allgeier, 1998) and discussions with a group of undergraduates. The subscales were developed using

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exploratory factor analysis and scale reliability analyses. The scale was developed and tested with college students but could be adapted for other populations.

Response Mode and Timing

Respondents are asked whether each item was true about the sexual experience they are describing. If so, they are asked to rate the extent to which that item was a reason for wanting or not wanting the sexual activity, using a 7-point scale from –3 (*a strong reason for not wanting to have sex*) to 3 (*a strong reason for wanting to have sex*). Respondents also are asked to make three global ratings, summarizing the wantedness of the sexual act, the wantedness of the consequences, and the overall wantedness of the experience. Completing the scale takes 15–20 minutes.

Scoring

To calculate subscale scores, all "*not true*" items are set to 0. To calculate *Reasons for Wanting Sex* subscale scores, negative ratings are set to 0; to calculate *Reasons for Not Wanting Sex* subscale scores, positive ratings are set to 0. Ratings for items on each subscale are averaged to calculate subscale scores. *Reasons for Wanting Sex* subscales can range from 0 to 3; higher scores indicate stronger feelings of wanting to have sex for that reason. *Reasons for Not Wanting Sex* subscales can range from –3 to 0; lower scores indicate stronger feelings of not wanting to have sex for that reason. Below are the subscale items.

Reasons for Wanting Sex *Subscales*

In the Mood: 1a, 2a, 3a, 6a, 7a, 10, 11a, 12a, 13a, 14, 16a, 17, 19, 22a, 26, 78

Negative Consequences of Refusing: 49, 62, 66, 67, 68, 71, 75, 80, 82

Personal Gain: 47, 48, 54, 79a

Social Benefits: 40a, 41a, 45

Fear of Physical Harm: 69, 74

Strengthen the Relationship: 50, 51, 59, 61

Not Intoxicated: 20a, 21a

Not a Virgin: 29b, 30b

Reasons for Not Wanting Sex *Subscales*

Not in the Mood: 1b, 2b, 3c, 5, 12b, 13b, 16b

Negative Consequences: 23, 31, 33, 34, 35, 36, 37, 39

Lack of Confidence: 4b, 18, 25, 28, 29a

Cheating: 63, 64

Disliked the Other Person: 6b, 7b

Negative Social Consequences: 40b, 41b

Reliability

In a sample of 213 college women who answered the SWQ about their experiences with consensual and nonconsensual sexual intercourse, Cronbach's alphas for the subscales ranged from .72 to .95, reflecting satisfactory internal consistency.

Validity

Because wanting/not wanting sex was conceptualized as distinct from consenting/not consenting, scores on the SWQ were expected to be associated with—but not identical to—sexual consent. Peterson and Muehlenhard (2007) found support for this. A group of 87 women who answered the SWQ based on an experience with consensual sexual intercourse was compared with a group of 77 women who answered based on an experience with nonconsensual sexual intercourse (i.e., rape). Not surprisingly, on average, the nonconsensual sex was rated as significantly less wanted than the consensual sex. However, there were large within-group variations in the wantedness of women's consensual and nonconsensual sexual experiences. Results demonstrated that individuals sometimes consent to unwanted sex and sometimes do not consent to wanted sex, providing support for conceptualizing wanting and consenting as distinct constructs.

Artime and Peterson (2015) asked 189 college women who had experienced nonconsensual sex to rate its overall wantedness using the SWQ global item ("Overall how much did you want or not want to engage in the sexual activity . . ."). Higher wantedness ratings were associated with less self-blame and fewer negative beliefs about themselves after controlling for the women's perceptions of their level of consent. In contrast, higher ratings of perceived consent were associated with more self-blame and more negative beliefs about themselves after controlling for wantedness. The fact that wantedness ratings and consent ratings functioned in opposite ways provides further support for the conceptual distinction between wanting and consenting.

Muehlenhard, Peterson, MacPherson, and Blair (2002) asked students about their first experiences with sexual intercourse. Almost two-thirds (63%) reported wanting the act but not wanting its consequences. These results provide support for distinguishing between these constructs.

Cilona, Mandilakis, Olin, Rodriguez, and Vasquez (2015) used the SWQ *Reasons for Wanting Sex* subscales to assess motives for engaging in sex. In a sample of 115 female and 41 male community college students, men scored significantly higher than women on three SWQ subscales; the *Social Benefit*s subscale (wanting to have sex to improve their reputation) showed the largest gender difference. The authors found positive correlations between four of the SWQ subscales and a measure of sexual narcissism; the highest correlation was between sexual narcissism and the *Personal Gain* subscale (wanting to have sex in order to get something they needed or wanted).

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Exhibit

The Sexual Wanting Questionnaire

Indicate whether each statement was true for you shortly before the sexual activity started.

- If this statement **was not true** for you at the time, check **not true** and go to the next line.
- If this statement **was true** for you at the time, then
  - Check **true**
  - Circle a number from –3 to 3 indicating how much, if at all, it was a reasons for **not wanting** or **wanting** to engage in sexual intercourse, based on the scale below

It was a reason for **not wanting** to engage in the sexual activity			It had no influence	It was a reason for **wanting** to engage in the sexual activity		
–3	–2	–1	0	1	2	3
a **strong** reason	a **moderate** reason	a **weak** reason	**not a reason** for wanting or not wanting to have sex	a **weak** reason	a **moderate** reason	a **strong** reason
for **not wanting** *to have sex*				for **wanting** *to have sex*		

Was this statement true for you shortly before the sexual activity began?	***Not true*** Check and go to the next line	***True*** Check and then circle your rating	a reason for *not wanting* the sexual activity				a reason for *wanting* the sexual activity		
1a. I was sexually aroused before the sexual intercourse began.	___	___	–3	–2	–1	0	1	2	3
1b. I was not sexually aroused before the sexual intercourse began.	___	___	–3	–2	–1	0	1	2	3
2a. I expected to be aroused during the sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
2b. I did not expect to be aroused during the sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
3a. I felt interested in and excited about the possibility of the sexual act.	___	___	–3	–2	–1	0	1	2	3
3b. I felt indifferent about the possibility of the sexual act; I didn't care one way or another.	___	___	–3	–2	–1	0	1	2	3
3c. I felt uninterested in and bored about possibility of the sexual act.	___	___	–3	–2	–1	0	1	2	3

4a.	I felt comfortable about my body.	___	___	–3	–2	–1	0	1	2	3
4b.	I felt uncomfortable about my body.	___	___	–3	–2	–1	0	1	2	3
5.	I felt disgusted or revolted by the possibility of the sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
6a.	I found the other person physically attractive.	___	___	–3	–2	–1	0	1	2	3
6b.	I found the other person physically unattractive.	___	___	–3	–2	–1	0	1	2	3
7a.	I liked the other person.	___	___	–3	–2	–1	0	1	2	3
7b.	I disliked the other person.	___	___	–3	–2	–1	0	1	2	3
8.	I didn't know the other person well.	___	___	–3	–2	–1	0	1	2	3
9a.	The sexual activity in question was socially acceptable.	___	___	–3	–2	–1	0	1	2	3
9b.	The sexual activity in question was socially unacceptable.	___	___	–3	–2	–1	0	1	2	3
10.	I felt curious to try sexual intercourse with this person in this situation.	___	___	–3	–2	–1	0	1	2	3
11a.	There was a good location available (it was comfortable, there was privacy, etc.).	___	___	–3	–2	–1	0	1	2	3
11b.	There was a problem with the location (it was uncomfortable, there was little privacy, etc.)	___	___	–3	–2	–1	0	1	2	3
12a.	I was in the mood to engage in sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
12b.	I was not in the mood to engage in sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
13a.	I found the other person's behavior appealing or attractive in this situation.	___	___	–3	–2	–1	0	1	2	3
13b.	The other person's behavior was unappealing or obnoxious in this situation.	___	___	–3	–2	–1	0	1	2	3
14.	It seemed that the other person wanted to engage in the sexual intercourse at least to some degree.	___	___	–3	–2	–1	0	1	2	3
15.	It seemed that the other person was at least somewhat reluctant to engage in the sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
16a.	I expected emotional closeness during this sexual activity.	___	___	–3	–2	–1	0	1	2	3
16b.	I did not expect emotional closeness during this sexual activity.	___	___	–3	–2	–1	0	1	2	3
17.	There would have been a great deal of physical closeness during this sexual activity.	___	___	–3	–2	–1	0	1	2	3
18.	I expected the sexual intercourse to be painful or physically uncomfortable.	___	___	–3	–2	–1	0	1	2	3
19.	I expected the sexual intercourse to be pleasurable.	___	___	–3	–2	–1	0	1	2	3
20a.	I was not intoxicated (on alcohol or drugs).	___	___	–3	–2	–1	0	1	2	3
20b.	I was mildly intoxicated (on alcohol or drugs).	___	___	–3	–2	–1	0	1	2	3
20c.	I was extremely intoxicated (on alcohol or drugs).	___	___	–3	–2	–1	0	1	2	3

21a.	The other person was not intoxicated (on alcohol or drugs).	___	___	–3	–2	–1	0	1	2	3
21b.	The other person was mildly intoxicated (on alcohol or drugs).	___	___	–3	–2	–1	0	1	2	3
21c.	The other person was extremely intoxicated (on alcohol or drugs).	___	___	–3	–2	–1	0	1	2	3
22a.	The other person consented (or agreed) to engage in the sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
22b.	The other person did not consent (or agree) to engage in the sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
23.	I felt that engaging in the sexual intercourse would make me feel uncomfortable because it would be going against my morals and values.	___	___	–3	–2	–1	0	1	2	3
24.	I or the other person was menstruating.	___	___	–3	–2	–1	0	1	2	3
25.	I was nervous about my ability to perform sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
26.	I was confident about my ability to perform sexual intercourse.	___	___	–3	–2	–1	0	1	2	3
27.	I felt physically unwell or sick.	___	___	–3	–2	–1	0	1	2	3
28.	It would have been my first time engaging in the sexual activity in question.	___	___	–3	–2	–1	0	1	2	3
29a.	I was a virgin.	___	___	–3	–2	–1	0	1	2	3
29b.	I was not a virgin.	___	___	–3	–2	–1	0	1	2	3
30a.	The other person was a virgin.	___	___	–3	–2	–1	0	1	2	3
30b.	The other person was not a virgin.	___	___	–3	–2	–1	0	1	2	3
31.	I thought that, if I had sex, I might get a sexually transmitted disease.	___	___	–3	–2	–1	0	1	2	3
32.	I thought I might give the other person a sexually transmitted disease.	___	___	–3	–2	–1	0	1	2	3
33.	I thought I might get pregnant or get the other person pregnant.	___	___	–3	–2	–1	0	1	2	3
34.	I thought I might get into trouble (e.g., with my parents, my boss, the police).	___	___	–3	–2	–1	0	1	2	3
35.	I thought I might feel bad or guilty because it was against my morals or values.	___	___	–3	–2	–1	0	1	2	3
36.	I thought I might feel bad or guilty because it was against my parents' morals or values.	___	___	–3	–2	–1	0	1	2	3
37.	I thought my parents might find out.	___	___	–3	–2	–1	0	1	2	3
38.	I thought that having sex would improve my self-esteem or self-image at least in some ways.	___	___	–3	–2	–1	0	1	2	3
39.	I thought that having sex would harm my self-esteem or self-image at least in some ways.	___	___	–3	–2	–1	0	1	2	3
40a.	I thought it would improve my reputation among my female friends and acquaintances.	___	___	–3	–2	–1	0	1	2	3
40b.	I thought it would harm my reputation among my female friends and acquaintances.	___	___	–3	–2	–1	0	1	2	3

41a.	I thought it would improve my reputation among my male friends and acquaintances.	___	___	–3	–2	–1	0	1	2	3
41b.	I thought it would harm my reputation among my male friends and acquaintances.	___	___	–3	–2	–1	0	1	2	3
42.	I thought it would prevent me from doing something else I needed to do (e.g., studying, going to work).	___	___	–3	–2	–1	0	1	2	3
43.	I thought it would prevent me from doing something else fun or pleasant (e.g., watching TV, going to a movie).	___	___	–3	–2	–1	0	1	2	3
44a.	I thought it would make the other person happy.	___	___	–3	–2	–1	0	1	2	3
44b.	I thought it would make the other person unhappy.	___	___	–3	–2	–1	0	1	2	3
45.	I thought it would give me something to talk about with friends and acquaintances.	___	___	–3	–2	–1	0	1	2	3
46.	I thought that, if I had sex, the other person might think I was cheap or easy.	___	___	–3	–2	–1	0	1	2	3
47.	I thought it might result in my getting something I really needed (e.g., food, money, transportation, shelter).	___	___	–3	–2	–1	0	1	2	3
48.	I thought it might result in my getting something I really wanted (e.g., a gift, a vacation).	___	___	–3	–2	–1	0	1	2	3
49.	I felt like it would fulfill my obligation to the other person.	___	___	–3	–2	–1	0	1	2	3
50.	I thought that it would demonstrate my love for the other person.	___	___	–3	–2	–1	0	1	2	3
51.	I thought that it would make me feel closer to the other person.	___	___	–3	–2	–1	0	1	2	3
52.	I thought that it would make the other person fall in love with me.	___	___	–3	–2	–1	0	1	2	3
53.	I thought that it would make me feel needed or wanted.	___	___	–3	–2	–1	0	1	2	3
54.	I thought that it would result in the other person doing something I wanted.	___	___	–3	–2	–1	0	1	2	3
55.	I felt like it would be fair to the other person because, in the past, he/she had engaged in sexual intercourse with me when I wanted to.	___	___	–3	–2	–1	0	1	2	3
56.	I thought that it would result in my being accused of rape or sexual coercion	___	___	–3	–2	–1	0	1	2	3
57.	I thought that I might regret it later.	___	___	–3	–2	–1	0	1	2	3
58.	I thought that the other person might regret it later.	___	___	–3	–2	–1	0	1	2	3
59.	I thought that having sex would strengthen my relationship with the other person in some ways.	___	___	–3	–2	–1	0	1	2	3
60.	I thought that having sex would damage my relationship with the other person in some ways.	___	___	–3	–2	–1	0	1	2	3
61.	I thought that it might lead to a steady relationship with the other person.	___	___	–3	–2	–1	0	1	2	3

62.	I thought that it would cause the other person to stop pressuring me.	___	___	–3	–2	–1	0	1	2	3
63.	It would have been "cheating," and I was afraid that it would damage my relationship with my spouse or steady dating partner.	___	___	–3	–2	–1	0	1	2	3
64.	It would have been "cheating," and I was afraid that it would hurt my spouse or steady dating partner.	___	___	–3	–2	–1	0	1	2	3
65a.	I wanted to be more sexually experienced.	___	___	–3	–2	–1	0	1	2	3
65b.	I did not want to be more sexually experienced.	___	___	–3	–2	–1	0	1	2	3
66.	I wanted to avoid hurting the other person's feelings.	___	___	–3	–2	–1	0	1	2	3
67.	Refusing sex would have made me feel guilty.	___	___	–3	–2	–1	0	1	2	3
68.	I was afraid that, if I refused, the other person would become angry.	___	___	–3	–2	–1	0	1	2	3
69.	I was afraid that, if I refused, the other person might harm me physically.	___	___	–3	–2	–1	0	1	2	3
70.	There was nothing else to do.	___	___	–3	–2	–1	0	1	2	3
71.	I was afraid that, if I refused, the other person might accuse me of being a tease or leading him/her on.	___	___	–3	–2	–1	0	1	2	3
72.	I was afraid that, if I refused, the other person might think I was ungrateful because he/she had done something for me.	___	___	–3	–2	–1	0	1	2	3
73.	I was afraid that refusing would make me seem selfish.	___	___	–3	–2	–1	0	1	2	3
74.	I was afraid that, if I refused, the other person might try to force me to do it.	___	___	–3	–2	–1	0	1	2	3
75.	I was afraid that the other person would be disappointed if we didn't have sex.	___	___	–3	–2	–1	0	1	2	3
76.	I thought that this was my only chance to have sex with this person—that it was now or never.	___	___	–3	–2	–1	0	1	2	3
77.	I was afraid that, if I refused, the other person might carry out some threat against me.	___	___	–3	–2	–1	0	1	2	3
78.	This was an experience that I didn't want to miss out on.	___	___	–3	–2	–1	0	1	2	3
79a.	I felt like having sex would have made me feel powerful.	___	___	–3	–2	–1	0	1	2	3
79b.	I felt like having sex would have made me feel powerless.	___	___	–3	–2	–1	0	1	2	3
80.	I thought that refusing might damage my relationship with the other person at least in some ways.	___	___	–3	–2	–1	0	1	2	3
81.	I thought that refusing might strengthen my relationship with the other person at least in some ways.	___	___	–3	–2	–1	0	1	2	3
82.	I was afraid that, if I refused, the other person might break up with me.	___	___	–3	–2	–1	0	1	2	3

83.	I was afraid that, if I refused, the other person might have sex with someone else.	___	___	–3	–2	–1	0	1	2	3
84.	It was a situation where sex was expected (e.g., it was prom night; the other person was my girlfriend/boyfriend visiting from out of town, etc.).	___	___	–3	–2	–1	0	1	2	3

Overall, how much did you want or not want to engage in the **sexual act itself** (not considering the consequences)?

–3	–2	–1	0	1	2	3
Strongly unwanted	Moderately unwanted	Slightly unwanted	No opinion	Slightly wanted	Moderately wanted	Strongly wanted

Overall, how much did you want or not want the **possible consequences** of engaging in the sexual activity?

–3	–2	–1	0	1	2	3
Strongly unwanted	Moderately unwanted	Slightly unwanted	No opinion	Slightly wanted	Moderately wanted	Strongly wanted

Overall, how much did you want or not want to engage in sexual activity in this situation (taking into account the sexual act itself, the possible consequences of engaging in the sexual act, and the possible consequences of not engaging in the sexual act)?

–3	–2	–1	0	1	2	3
Strongly unwanted	Moderately unwanted	Slightly unwanted	No opinion	Slightly wanted	Moderately wanted	Strongly wanted

Meanings of Sexual Behavior Inventory

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The 43-item Meanings of Sexual Behavior Inventory (MoSBI; Shaw & Rogge, 2016) measures positive and negative meanings of sexual behavior within committed romantic relationships. The MoSBI builds on scales like the Why Have Sex? (YSEX?; Meston & Buss, 2007), the Sexual Motives Scale (SMS; Cooper, Shapiro, & Powers, 1998), and the Affective and Motivational Orientation Related to Erotic Arousal (AMORE; Hill & Preston, 1996) that had already been developed to assess meanings and motives primarily for casual sex. In contrast to those existing scales, the MoSBI was specifically created to assess meanings of sex within romantic relationships, providing couples, researchers and clinicians with a tool to better understand how those meanings and motives could impact relationships across time (see Shaw & Rogge, 2016).

Development

To create the MoSBI, the authors first collected open-ended responses from 376 online respondents (67% female, 70%

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Caucasian, 16% completed high school or less) in currently sexually active relationships (75% dating, 20% married, 5.2% engaged). This yielded 2,930 open-ended responses concerning possible uses and meanings of sex in their current relationships. From those open-ended responses, a pool of 104 items was created to both represent the diversity of responses obtained and retain the subjects' wording as much as possible. That pool of items was then given to 3,003 online respondents (65% female, 75% Caucasian, average age of 27.2 years, 13% completed high school or less) in currently sexually active relationships (57% dating exclusively, 29% married, 8.3% engaged, 6.6% dating casually; Shaw & Rogge, 2016).

After excluding items with low variability and/or high levels of cross-loading, an Exploratory Factor Analysis (EFA; using principle axis factoring with oblimin rotation) on 82 items in the 3,003 online respondents identified nine robust factors representing both positive and negative meanings of sex in relationships. Although these factors included a number of dimensions similar to those of existing scales (e.g., "*to bond*," "*to de-stress*," "*to share pleasure*"), novel dimensions of meaning emerged from the MoSBI's unique focus on meanings within relationships (i.e., "*to energize one's relationship*," "*to learn more about each other*," and "*to manage conflict*"). Once the nine dimensions were identified, separate Item Response Theory (IRT; Hambleton, Swaminathan, & Rogers, 1991) analyses were conducted on each of the nine sets of items to identify the four to five items that most effectively assessed each dimension. This analytic approach helped to ensure that the final MoSBI scale would offer the greatest information and power for detecting differences between individuals on those dimensions while still using very small numbers of items.

Higher-Order Structure

Once the items of the MoSBI were selected, subscale averages were calculated and were then subjected to another EFA using principal axis factoring with oblimin rotation in the 3,003 online respondents. This second EFA helped to determine if the nine subscales of the MoSBI organized themselves into a discernable higher-order structure. The results suggested that the five positive dimensions of meaning, while still somewhat distinct from one another, could also be organized into a larger construct representing overall positive meanings of sex. Similarly, the four negative dimensions, while still reasonably distinct from one another, could also be organized into a larger construct representing overall negative meanings of sex.

Response Mode and Timing

Each item is rated on a 6-point response scale: 0 (*Never*), 1 (*Rarely*), 2 (*Occasionally*), 3 (*About half of the time*), 4 (*Most of the time*), and 5 (*All of the time*). Positive items were presented with the stem "*In your relationship, how often do you use sexual activity . . .*" Negative items were presented with the stem "*In your relationship, how often do you use sexual activity (or withholding sexual activity) . . .*" The items were not presented with a specified time frame. The 43-item scale takes roughly 4 minutes to complete.

Scoring

For all items, responses are given values on a 6-point scale as detailed above (with responses then coded as values ranging from 0 to 5). The responses within each subscale are summed so that higher scores reflect stronger endorsement of that specific meaning of sexual behavior. Thus, to create the 5 positive subscale totals you simply sum the responses to the following sets of items: *to share pleasure* (Items 1–4), *to bond* (Items 5–9), *to de-stress* (Items 10–14), *to energize the relationship* (Items 15–19), *to learn more about each other* (Items 20–24). To create the 4 negative subscale totals, you sum the responses to the following sets of items: *to manage conflict* (Items 25–29), *as an incentive* (Items 30–34), *to express anger* (Items 35–39), *to control your partner* (Items 40–43). The MoSBI subscales demonstrated reasonable discriminant validity from one another (see below), suggesting that they are measuring relatively distinct constructs and will therefore often yield distinct patterns of results if modeled as separate variables in analyses; however, the higher-order EFA also suggested that the positive subscales share quite a bit of common variance. As a result, if in a specific set of analyses the positive subscales yield identical patterns of results to one another, it would also be appropriate to collapse those subscale scores into a positive meanings composite (i.e., summing them together). Similarly, the negative subscales can be treated as separate variables in models or they can be averaged together into a global negative composite as appropriate.

Reliability

Results in the development sample suggested that the MoSBI subscales maintained high levels of internal consistency (i.e., Cronbach's alphas ranging from .80 to .96) across a broad range of demographic groups: gender groups, couples with different living arrangements, racial/ethnic groups, relationship stages, education levels, and sexual orientations. These results suggest that the QSI scales should function well across a broad range of future samples.

Validity

The MoSBI subscales demonstrated reasonable levels of discriminant validity, demonstrating novel patterns of correlation with a broad array of conceptual boundary scales

examined (e.g., relationship satisfaction, frequency of physical affection, libido, and negative conflict).

After controlling for baseline relationship satisfaction and frequency of sexual behavior, the MoSBI demonstrated a unique predictive validity, with subscales significantly predicting change in relationship satisfaction over a two-month follow-up period. Secondary EFA analyses run in men and women separately yielded nearly identical results across gender groups, revealing a very stable correlational structure. In addition, the MoSBI subscales demonstrated similarly high levels of internal consistency when analyzed in men and women separately. Taken together, these results offer initial support for measurement invariance, suggesting that the MoSBI scales are likely to operate equally across men and women.

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Exhibit

Meanings of Sexual Behavior Inventory

In your relationship how often do you use sexual activity (or withholding sexual activity) …

	0 Never	1 Rarely	2 Occasionally	3 About half of the time	4 Most of the time	5 All of the time
1. To share pleasure.	○	○	○	○	○	○
2. To have fun together.	○	○	○	○	○	○
3. To satisfy our desires.	○	○	○	○	○	○
4. To enjoy time together.	○	○	○	○	○	○
5. To show love.	○	○	○	○	○	○
6. To bond.	○	○	○	○	○	○
7. To stay connected.	○	○	○	○	○	○
8. To strengthen our relationship.	○	○	○	○	○	○
9. To build intimacy.	○	○	○	○	○	○
10. To de-stress.	○	○	○	○	○	○
11. To relieve stress.	○	○	○	○	○	○
12. To release tension.	○	○	○	○	○	○
13. To unwind.	○	○	○	○	○	○
14. To relax.	○	○	○	○	○	○
15. To liven things up.	○	○	○	○	○	○
16. To spice things up.	○	○	○	○	○	○
17. To keep things interesting.	○	○	○	○	○	○
18. To keep your relationship exciting and new.	○	○	○	○	○	○
19. To energize your relationship.	○	○	○	○	○	○
20. To find out more about each other.	○	○	○	○	○	○
21. To learn more about each other.	○	○	○	○	○	○
22. To discover new things about each other.	○	○	○	○	○	○

23.	To grow to know each other better.	○	○	○	○	○	○
24.	To understand each other better.	○	○	○	○	○	○
25.	To get over a fight.	○	○	○	○	○	○
26.	To patch things up after a fight.	○	○	○	○	○	○
27.	To make up.	○	○	○	○	○	○
28.	To stop fighting.	○	○	○	○	○	○
29.	To resolve conflicts.	○	○	○	○	○	○
30.	As an incentive to get something.	○	○	○	○	○	○
31.	To get something you want.	○	○	○	○	○	○
32.	As a bribe for your partner.	○	○	○	○	○	○
33.	As a bargaining chip.	○	○	○	○	○	○
34.	To get your partner to agree with you.	○	○	○	○	○	○
35.	To make it clear that you're mad.	○	○	○	○	○	○
36.	To show that you're upset.	○	○	○	○	○	○
37.	To frustrate your partner.	○	○	○	○	○	○
38.	To punish.	○	○	○	○	○	○
39.	To get your partner to leave you alone.	○	○	○	○	○	○
40.	To dominate your partner.	○	○	○	○	○	○
41.	To show your partner who's boss.	○	○	○	○	○	○
42.	To show your power	○	○	○	○	○	○
43.	To assert control.	○	○	○	○	○	○

Motives for Feigning Orgasms Scale

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The 25-item Motives for Feigning Orgasms Scale (MFOS; Séguin, Milhausen, & Kukkonen, 2015) assesses men's and women's motives for pretending orgasm. The scale measures seven general motives: *Intoxication, Partner Self-Esteem, Poor Sex/Partner, Desireless Sex, Timing, Insecurity*, and *Improve Sex*. These seven motives are grouped under three overarching models: (1) the Prosocial Model (*Partner Self-Esteem* and *Timing*); (2) the Get it Over with Model (*Poor Sex/Partner* and *Desireless Sex*); and (3) the Feel Better Model (*Intoxication, Insecurity*, and *Improve Sex*).

Development

Based on the available orgasm-simulation literature (Bryan, 2001; Hite, 1976; Muehlenhard & Shippee, 2010), we initially created a set of 60 items measuring people's motives for pretending orgasm, which we administered to

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an online, predominantly American, sample of men and women having pretended orgasm at least once with their current relationship partner, who were in relationships of at least 4 weeks, and who were between the ages of 18 and 29 (N = 147). Participants were recruited from Amazon's Mechanical Turk. Exploratory factor analysis yielded a 6-factor solution: *Intoxication, Partner Self-Esteem, Poor Sex/Partner, Desireless Sex, Timing*, and *Insecurity*. Items that had factor loadings lower than .32 and higher than 1.00, items that loaded on more than one factor, and two-item factors were removed to create a final 25-item scale.

Using identical eligibility criteria, we subsequently recruited a new sample of men and women from Mechanical Turk (N = 194) to conduct a confirmatory factor analysis. An analysis of the six factors defined by the 25 MFOS items, including modelling correlations among all factors, resulted in an unacceptable fit. A six-factor model was judged to be unable to accurately represent the MFOS's 25 items. On theoretical grounds, we then followed a different approach and tested three different two-factor models (*Partner Self-Esteem–Timing, Poor Sex/Partner–Desireless Sex*, and *Intoxication–Insecurity*). An analysis of the *Partner Self-Esteem–Timing* two-factor model (the Pro-social Model) resulted in a good model fit (NFI = .914, TLI = .919, CFI = .945, RMSEA = .089), as did an analysis of the *Poor Sex/Partner–Desireless Sex* two-factor model (the Get it Over with Model) (NFI = .915, TLI = .912, CFI = .941, RMSEA = .102). While an analysis of the *Intoxication–Insecurity* two-factor model also resulted in acceptable model fit, the data contained within the *Insecurity* factor was found to be theoretically represented by two sub-factors (*Insecurity*, and *Improve Sex*). Thus, an analysis of the *Intoxication–Insecurity–Improve Sex* three-factor model (the Feel Better Model) was conducted and resulted in a better model fit than the initial two-factor model (NFI = .945, TLI = .956, CFI = .971, RMSEA = .073).

Response Mode and Timing

The measure can be completed on a computer or using paper and pencil in approximately 3–4 minutes. From 1 (*not at all important*) to 7 (*extremely important*), participants rate how important each of the listed reasons were in influencing their decision to pretend orgasm, from the first time to the most recent time they had pretended to have an orgasm with their current partner.

Scoring

No items are reverse-coded. The items from each subscale—*Intoxication* (Items 1, 8, and 15), *Partner Self-Esteem* (Items 2, 9, 16, 22, and 25), *Poor Sex/Partner* (Items 3, 10, 17, and 23), *Desireless Sex* (Items 4, 11, 18, and 24), *Timing* (Items 5, 12, and 19), *Insecurity* (Items 6, 13, and 20), and *Improve Sex* (Items 7, 14, and 21)—are averaged to create subscale scores. Higher scores reflect greater endorsement of each overarching motive to pretend orgasm. Both men (M = 5.64, SD = 1.15) and women (M = 5.84, SD = 1.04) scored the highest on the *Partner Self-Esteem* subscale, indicating a desire to increase a partner's self-esteem or happiness by delivering an orgasm (Séguin et al., 2015). In a separate sample of emerging adult men in committed relationships (N = 230), partner self-esteem motives were also the most highly endorsed (M = 5.25, SD = 1.42; Séguin & Milhausen, 2016). Some gender differences on MFOS subscales were found, with men scoring higher on the *Intoxication, Poor Sex/Partner*, and *Insecurity* subscales compared to women (see Table 1; Séguin et al., 2015). No significant gender differences were found on the *Partner Self-Esteem, Desireless Sex, Timing*, and *Improve Sex* subscales.

TABLE 1
Gender Comparisons on MFOS Subscales

	Women[a]		Men[b]		*t*	*p*
	M	*SD*	*M*	*SD*		
Intoxication	2.21	1.63	3.68	1.99	–5.619	.000
Partner Self-Esteem	5.84	1.04	5.64	1.15	1.291	.192
Poor Sex/Partner	2.37	1.41	3.29	1.86	–3.873	.000
Desireless Sex	3.54	1.65	3.80	1.76	–1.044	.298
Timing	4.77	1.83	4.84	1.62	–.281	.779
Insecurity	2.90	1.65	4.06	1.87	–4.562	.000
Improve Sex	4.49	1.83	4.95	1.85	–1.757	.081

[a]n = 101. [b]n = 93.

Reliability

Internal consistency on the MFOS's seven subscales was demonstrated with Cronbach's alphas of .94 for *Intoxication*, .83 for *Partner Self-Esteem*, .86 for *Poor Sex/Partner*, .82 for *Desireless Sex*, .85 for *Timing*, .75 for *Insecurity*, and .79 for *Improve Sex* (Séguin et al., 2015). Test–retest reliability conducted at a two-week interval (N = 74) revealed stable subscales with Pearson coefficients of .82 for *Intoxication*, .59 for *Partner Self-Esteem*, .81 for *Poor Sex/Partner*, .76 for *Desireless Sex*, .51 for *Timing*, .71 for *Insecurity*, and .76 for *Improve Sex* (Séguin et al., 2015).

Validity

Convergent and discriminant validity were assessed using Impett, Peplau, and Gable's (2005) Sexual Goals questionnaire, an instrument measuring individuals' approach (e.g., to promote intimacy in my relationship) and avoidant (e.g., to avoid conflict in my relationship) motives for sex. Because they measure similar motives, we had expected the prosocial subscales of the MFOS to positively correlate with Impett et al.'s (2005) Approach Motives subscale, and the *Insecurity* subscale, with the Avoidance Motives subscale. Convergent validity was demonstrated with scores

on the MFOS's *Partner Self-Esteem* (r = .39), *Timing* (r = .24), and *Improve Sex* (r = .38) subscales positively correlating with the Approach Motives subscale, and with scores on the *Poor Sex/Partner* (r = .50) and *Insecurity* (r = .61) subscales positively correlating with the Avoidance Motives subscale (Séguin et al., 2015). The Approach Motives subscale did not correlate with the *Intoxication, Poor Sex/Partner, Desireless Sex*, and *Insecurity* subscales, providing supporting evidence for the MFOS's discriminant validity.

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Exhibit

Motives for Feigning Orgasms Scale

The list presented below contains reasons and motivations that men and women have given for having pretended orgasm with their relationship partner. From 1 (not at all important) to 7 (extremely important), please rate how important, on average, each of the following reasons were in influencing your decision to pretend to have an orgasm, from the first time to the most recent time you have pretended orgasm, with your current relationship partner. If you are in a multi-partnered or a polyamorous relationship, please refer to your primary, nesting, or your longest ongoing relationship.

	1 Not at all important	2	3	4	5	6	7 Extremely important
1. I had too much to drink.	○	○	○	○	○	○	○
2. I wanted my partner to think s/he did a good job.	○	○	○	○	○	○	○
3. I felt uncomfortable with my partner.	○	○	○	○	○	○	○
4. I was not in the mood.	○	○	○	○	○	○	○
5. My partner seemed ready to have an orgasm.	○	○	○	○	○	○	○
6. I wanted to avoid appearing frigid.	○	○	○	○	○	○	○
7. I wanted to reinforce a sexual technique that my partner used.	○	○	○	○	○	○	○
8. I was too drunk.	○	○	○	○	○	○	○
9. I wanted to make my partner feel good about himself/herself.	○	○	○	○	○	○	○
10. The sex was awkward.	○	○	○	○	○	○	○
11. I did not feel like having sex.	○	○	○	○	○	○	○
12. My partner was about to have an orgasm.	○	○	○	○	○	○	○
13. I wanted to avoid appearing abnormal or inadequate.	○	○	○	○	○	○	○
14. I wanted to add a bit of excitement in our lovemaking.	○	○	○	○	○	○	○
15. I was too intoxicated.	○	○	○	○	○	○	○

16. I wanted to boost my partner's self-esteem.	○	○	○	○	○	○	○
17. I regretted my choice of partner.	○	○	○	○	○	○	○
18. I felt tired or wanted to sleep.	○	○	○	○	○	○	○
19. My partner's orgasm seemed imminent.	○	○	○	○	○	○	○
20. I wanted to avoid losing my partner.	○	○	○	○	○	○	○
21. I wanted to feel or appear sexy.	○	○	○	○	○	○	○
22. I wanted to make my partner happy.	○	○	○	○	○	○	○
23. My partner was unskilled.	○	○	○	○	○	○	○
24. I wanted to avoid discussing my not having an orgasm.	○	○	○	○	○	○	○
25. I wanted to avoid hurting my partner's feelings.	○	○	○	○	○	○	○

21 Pleasure, Satisfaction, and Orgasm

The New Sexual Satisfaction Scale and Its Short Form

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The New Sexual Satisfaction Scale (NSSS; $k = 20$) and its short form (NSSS-S; $k = 12$) are multi-dimensional self-report scales designed to measure sexual satisfaction in both clinical and non-clinical samples. The conceptual framework of the NSSS derives from the sexuality counseling and psychotherapy literature, focuses on multiple aspects of sexual satisfaction, and is gender, sexual orientation and relationship status neutral (Štulhofer, Buško, & Brouillard, 2010, 2011).

Development

Initial bicultural construction and validation of the NSSS were carried out in Croatia and the United States using seven independent samples with over 2,000 participants aged 18–55 years.

Principal components analysis was carried out on an initial pool of 35 Likert-type items generated by the proposed five-dimensional conceptual framework. Oblimin method extraction and rotation suggested a forced two-factor solution which proved stable across the samples. Using both statistical and content-related characteristics, 20 items were retained from the initial set creating two 10-item subscales: *The Ego-Centered* subscale and the *Partner/Sexual Activity-Centered* subscale. The short version or NSSS-S was subsequently developed in order to facilitate the use of the NSSS in clinical and non-clinical studies and demonstrates reliability and validity comparable to the full scale instrument (Štulhofer et al., 2011).

The NSSS-S was recently validated in Spanish (Strizzi, Fernández-Agis, Alarcón-Rodriguez, & Parrón-Carreño, 2016), Portuguese (Pechorro, Pascoal, Neves, Almeida, & Vieira, 2016), and German samples (Hoy, Strauß, Kröger, & Brenk-Franz, 2019). For a Portuguese validation of the full NSSS, see Pechorro et al. (2015). Both translated measures were found to have sound psychometric properties and yielded a two-factor solution—also reported in an online study carried out in the USA ($N = 425$; Mark, Herbenick, Fortenberry, Sanders, & Reece, 2014).

Response Mode and Timing

For each item, respondents are asked to rate their level of satisfaction with their sex life in the preceding 6 months using the following 5-point Likert type scale: 1 (*not at all satisfied*), 2 (*a little satisfied*), 3 (*moderately satisfied*), 4 (*very satisfied*), 5 (*extremely satisfied*).

Scoring

The *Ego-Centered* subscale (Items 1–10), *Partner and Activity-Centered* subscale (Items 11–20), NSSS (Items 1–20), and NSSS-S (Items 2–3, 5–6, 8, 10–12, 14, 17, 19–20) are computed by summing the related items, with higher scores representing higher levels of sexual satisfaction.

Reliability

Internal consistency in bicultural student and community samples, and a sample of Croatian non-heterosexual men and women was high for the full scale (Cronbach's $\alpha = .94–.96$), its two subscales ($\alpha = .91–.93$ and $\alpha = .90–.94$, respectively), and the short version ($\alpha = .90–.93$; Štulhofer et al., 2010, 2011). No substantial gender-specific or sexual orientation-specific differences were observed. In the Spanish sample, internal consistency of the NSSS-S was satisfactory both for the overall scale ($\alpha = .92$) and its subscales ($\alpha = .88$ and .87). Similar findings were reported in the Portuguese validation study (Pechorro et al., 2016),

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in which Cronbach's alpha was .94 for the scale and .92 and .89 for its subscales, and in the Mark et al. (2014) study (α = .91 for the full scale).

Test–retest reliability of the NSSS and NSSS-S was shown to be satisfactory in a sample of Croatian students (N = 219) over a one-month period, with somewhat stronger associations reported among women (Štulhofer et al., 2010). A comparable value (.81) was reported in the Mark et al. (2014) study, in which test–retest reliability of the NSSS-S was assessed after two months.

Validity

In support of convergent validity, associations between a global (single-item) measure of sexual satisfaction and the NSSS/NSSS-S scores were significant and strong in the initial studies (Štulhofer et al., 2010, 2011), the Portuguese study (Pechorro et al., 2015), and the Mark et al. (2014) study.

The NSSS and NSSS-S were shown to be significantly positively associated with a general measure of life satisfaction (Štulhofer et al., 2010, 2011). Significant negative correlations with the shortened Sexual Boredom Scale scores (Watt & Ewing, 1996) and positive correlations with relationship intimacy, partner communication about sex, and relationship status were also found among both Croatian and the U.S. male and female college students. In addition, the NSSS-S was moderately correlated with the General Measure of Relationship Satisfaction (Mark et al., 2014). Portuguese versions of the NSSS and NSSS-S were significantly correlated with sexual sensation seeking and (negatively) with sexual boredom (Pechorro et al., 2015, 2016). A study focusing on avoidant and anxious attachment styles and sexual satisfaction reported a significant negative relationship between insecure attachment and the NSSS scores (Khoury & Findlay, 2014).

Significant differences were found in the average NSSS and NSSS-S scores between participants in a clinical sample of individuals undergoing sex therapy (N = 54; Mean age = 34.6) and a large non-clinical community sample of comparable age (Štulhofer et al., 2010, 2011). Participants with sexual difficulties systematically reported lower sexual satisfaction (Cohen's d values ranged from –1.07 to –1.39). Discriminant analyses with the NSSS and NSSS-S as independent variables—carried out to predict membership in the clinical vs. nonclinical community sample—correctly classified 80.3 percent and 79.6 percent of cases, respectively.

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Exhibit

The New Sexual Satisfaction Scale

Thinking about your sex life during the last six months please rather your satisfaction with the follow aspects:

	1 Not at all Satisfied	2 A Little Satisfied	3 Moderately Satisfied	4 Very Satisfied	5 Extremely Satisfied
1. The intensity of my sexual arousal.	○	○	○	○	○
2. The quality of my orgasms.	○	○	○	○	○
3. My "letting go" and surrender to sexual pleasure during sex.	○	○	○	○	○
4. My focus/concentration during sexual activity.	○	○	○	○	○
5. The way I sexually react to my partner.	○	○	○	○	○
6. My body's sexual functioning.	○	○	○	○	○

7. My emotional opening up in sex.	○	○	○	○	○
8. My mood after sexual activity.	○	○	○	○	○
9. The frequency of my orgasms.	○	○	○	○	○
10. The pleasure I provide to my partner.	○	○	○	○	○
11. The balance between what I give and receive in sex.	○	○	○	○	○
12. My partner's emotional opening up during sex.	○	○	○	○	○
13. My partner's initiation of sexual activity.	○	○	○	○	○
14. My partner's ability to orgasm.	○	○	○	○	○
15. My partner's surrender to sexual pleasure ("letting go").	○	○	○	○	○
16. The way my partner takes care of my sexual needs.	○	○	○	○	○
17. My partner's sexual creativity.	○	○	○	○	○
18. My partner's sexual availability.	○	○	○	○	○
19. The variety of my sexual activities.	○	○	○	○	○
20. The frequency of my sexual activity.	○	○	○	○	○

Interpersonal Exchange Model of Sexual Satisfaction Questionnaire

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The Interpersonal Exchange Model of Sexual Satisfaction (IEMSS) Questionnaire assesses the components of the IEMSS, a conceptual framework for understanding sexual satisfaction within relationships. It addresses a number of methodological limitations associated with previous research on sexual satisfaction, namely use of single-item measures with unknown reliability and validity, inclusion in multi-item scales of items that are used as predictors of sexual satisfaction (e.g., sexual frequency), and failure to validate measures for sexual-minority individuals.

The IEMSS Questionnaire comprises three self-report measures which assess the components of the model: the Global Measure of Sexual Satisfaction (GMSEX), the Global Measure of Relationship Satisfaction (GMREL), and the Exchanges Questionnaire. The questionnaire also includes a checklist of sexual rewards and costs (Rewards/Costs Checklist; RCC). These components can be administered together or individually.

Development

Theory development preceded development of the IEMSS Questionnaire. In keeping with definitions of subjective well-being generally (Byers & Rehman, 2014), Lawrance and Byers's (1992, 1995) developed a conceptual definition of sexual satisfaction that takes both affective and cognitive factors into account. Specifically, they defined sexual satisfaction as *an affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship* (Lawrance & Byers, 1995, p. 268). In addition, they extended Social Exchange Theory (Byers, & Wang, 2004) to sexual satisfaction and developed the Interpersonal Model of Sexual Satisfaction. The IEMSS proposes that sexual satisfaction is influenced by (a) the balance of sexual rewards and sexual costs in the relationship, (b) how these rewards and costs compare to the expected levels of rewards and costs, (c) the perceived equality of rewards and costs between partners, and (d) the nonsexual aspects of the relationship (Lawrance & Byers, 1995). Sexual rewards are exchanges that people experience as pleasurable and gratifying; sexual costs are exchanges that demand effort or cause pain, anxiety, or other negative affect. Because sexual satisfaction is a function of the history of sexual exchanges, repeated assessments of these components provides a better indication of sexual satisfaction than does a single assessment (Byers & MacNeil, 2006; Lawrance & Byers 1995).

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Lawrance and Byers (1995) then designed the GMSEX, GMREL, and Exchanges Questionnaire to assess the components of the IEMSS as well as to avoid overlap between the the measures of sexual exchanges and satisfaction. The 58-item RCC was developed based on open-ended questions about the sexual rewards and costs experienced by university students in mixed-sex relationships (Lawrance & Byers, 1992). The RCC was later revised to include additional sexual rewards and costs identified by lesbians and gay men (Cohen, Byers, & Walsh, 2008).

Response Mode and Timing

For each item, respondents mark a response on a bipolar scale, rating scale, or checklist.

GMSEX assesses overall sexual satisfaction. Respondents rate their sex life on five 7-point dimensions: *Good–Bad, Pleasant–Unpleasant, Positive–Negative, Satisfying–Unsatisfying, Valuable–Worthless*. GMREL is identical to the GMSEX except that respondents rate their overall relationship satisfaction.

The Exchanges Questionnaire assesses respondents' levels of sexual rewards and costs. Using 9-point scales, respondents indicate (a) their level of rewards, from *Not at all Rewarding* to *Extremely Rewarding* (REW), (b) how their level of rewards compares to the level of rewards they expected to receive, from *Much Less Rewarding in Comparison* to *Much More Rewarding in Comparison* (CL_{REW}), and (c) how their level of rewards compares with the level of rewards their partner receives, from *My Rewards Are Much Higher* to *My Partner's Rewards Are Much Higher*. Parallel items are used to assess respondents' level of sexual costs (CST), relative level of sexual costs (CL_{CST}), and perceived equality of sexual costs.

Respondents are presented with RCC twice (in counterbalanced order). They indicate whether each item is a reward in their sexual relationship and whether each item is a cost in their sexual relationship.

Together, the GMSEX, GMREL, and Exchanges Questionnaire take 10 minutes to complete. The RCC takes another 10 minutes to complete.

Scoring

The five items on the GMSEX and GMREL are rated on scales ranging from 1 to 7. Items on each scale are summed such that possible scores range from 5 to 35, with higher scores indicating greater sexual or relationship satisfaction.

The six items on the Exchanges Questionnaire are rated on scales ranging from 1 to 9. The four components of the IEMSS (REW-CST, $CL_{REW} - CL_{CST}$, EQ_{REW}, EQ_{CST}) are calculated from these scores. REW-CST is calculated by subtracting Item 4 from Item 1 so that the possible range of scores is –8 to 8. $CL_{REW} - CL_{CST}$ is calculated by subtracting Item 5 from Item 2 so that the possible range of scores is –8 to 8. To calculated EQ_{REW} and EQ_{CST}, the perceived equality items (Item 3 and Item 6) are recoded such that the midpoint, which represents perfect equality, is assigned a score of 4 and the endpoints are assigned scores of 0. Thus, higher scores represent greater equality between partners.

The total number of sexual rewards and costs for the RCC are determined by summing the number of rewards and costs endorsed. Responses to individual items indicate the types of rewards and costs experienced.

Reliability

Studies using married and/or cohabiting individuals in mixed-sex relationships in North America, China, Spain, and Portugal as well as sexual-minority women and individuals with autism spectrum disorder in North America indicate that the GMSEX and GMREL have high internal consistency, ranging from .90 to .96 for the GMSEX and from .91 to .97 for GMREL (Byers & Cohen, 2017; Byers & Nichols, 2014; Lawrance & Byers, 1992, 1995; Peck, Shaffer, & Williamson, 2004; Renaud, Byers, & Pan, 1997; Sánchez-Fuentes & Santos-Iglesias, 2016; Sánchez-Fuentes, Santos-Iglesias, Byers, & Sierra, 2015). Test–retest reliabilities also are high: .84 at 2 weeks, .78 at 3 months, and .73 at 18 months for GMSEX, and .81 at 2 weeks, .70 at 3 months, and .61 at 18 months for GMREL (Byers & MacNeil, 2006; Lawrance & Byers, 1995; also see Mark, Herbenick, Fortenberry, Sanders, & Reece, 2014 and Sánchez-Fuentes et al., 2015). As anticipated, for individuals in long-term relationships, test–retest reliabilities are moderate for REW, CST, CL_{REW}, CL_{CST}, REW – CST, and $CL_{REW} - CL_{CST}$, ranging from .38 to .92 at 4 weeks, .32 to .87 at 6 weeks, .43 to .67 at 3 months, and .25 to .56 at 18 months (Byers & MacNeil, 2006; Lawrance & Byers, 1995; Sánchez-Fuentes et al., 2015).

Validity

Initial evidence for the validity of the IEMSS Questionnaire is based on a sample of 59 undergraduate women and 31 undergraduate men who were sexually experienced and had been in a "serious" relationship that had lasted at least 1 year (Lawrance & Byers, 1992, 1995). Construct validity for GMSEX was supported by a significant correlation of –.65 ($p < .001$) with scores on the Index of Sexual Satisfaction (ISS; Hudson, Harrison, & Crosscup, 1981). For GMREL, construct validity was supported by a significant correlation with the Dyadic Adjustment Scale (Spanier, 1976; $r = .69$, $p < .001$). Further, a higher level of rewards was negatively correlated with the ISS ($r = –.66$, $p < .001$) as well as a single-item measure of sexual satisfaction ($r = .64$, $p < .001$). The level of costs was significantly correlated with the ISS ($r = .30$, $p < .01$); however, it was not significantly correlated with a single-item measure of sexual satisfaction ($r = –.15$). More recently, Mark et al. (2014) demonstrated that the GMSEX has convergent validity with the ISS, the New Sexual Satisfaction Scale—Short (Štulhofer, Buško, & Brouillard, 2011), and a single item measure of sexual satisfaction in a community sample. Researchers have found

that higher scores on the GMSEX and/or GMREL are associated with each other as well as with multiple indicators of sexual and relationship functioning including sexual communication, sexual esteem, sexual cognitions, sexual desire, sexual frequency, sexual functioning, dyadic adjustment, and communality, supporting the scales' construct validity (Cohen & Byers, 2014; MacNeil & Byers, 2009; Peck et al., 2004; Renaud & Byers, 2001; Sánchez-Fuentes et al., 2015). Finally, the items on the Exchanges Questionnaire and the components of the model are all significantly and uniquely correlated with GMSEX, and multiple assessments enhance the prediction of sexual satisfaction, providing strong support for the validity of the IEMSS (Byers & Cohen, 2017; Byers & MacNeil, 2006; Lawrance & Byers, 1995).

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Exhibit

Interpersonal Exchange Model of Sexual Satisfaction Questionnaire

GMSEX

Overall, how would you describe your *sexual* relationship with your partner?

1	2	3	4	5	6	7
Very Bad						Very Good
1	2	3	4	5	6	7
Very Unpleasant						Very Pleasant
1	2	3	4	5	6	7
Very Negative						Very Positive
1	2	3	4	5	6	7
Very Unsatisfying						Very Satisfying
1	2	3	4	5	6	7
Worthless						Very Valuable

GMREL

In general, how would you describe your *overall* relationship with your partner?

1	2	3	4	5	6	7
Very Bad						Very Good
1	2	3	4	5	6	7
Very Unpleasant						Very Pleasant
1	2	3	4	5	6	7
Very Negative						Very Positive
1	2	3	4	5	6	7
Very Unsatisfying						Very Satisfying
1	2	3	4	5	6	7
Worthless						Very Valuable

Exchanges Questionnaire

When people think about their sexual relationship with their partner, most can think of both rewards and costs about their sexual relationship. **Rewards** are things that are positive or pleasing: things they like about their sexual relationship. **Costs** are things that are negative or displeasing: things they don't like about their sexual relationship.

1. Think about the *rewards* that you have received in *your sexual relationship with your partner* within the past three months. How rewarding is your sexual relationship with your partner?

1	2	3	4	5	6	7	8	9
Not at all Rewarding								Extremely Rewarding

2. Most people have a general *expectation* about *how rewarding* their sexual relationship "should be." Compared to this general expectation, they may feel that their sexual relationship is more rewarding, less rewarding, or as rewarding as it "should be." Based on your own expectation about how rewarding your sexual relationship with your partner "should be," how does your level of rewards compare to that expectation?

1	2	3	4	5	6	7	8	9
Much Less Rewarding in Comparison								Much More Rewarding in Comparison

3. How does the level of *rewards* that you get from your sexual relationship with your partner compare to the level of rewards that your partner gets from the relationship?

1	2	3	4	5	6	7	8	9
My Rewards Are Much Higher								My Partner's Rewards Are Much Higher

4. Think about the costs that you have incurred in *your sexual relationship with your partner* within the past three months. How costly is your sexual relationship with your partner?

1	2	3	4	5	6	7	8	9
Not at All Costly								Extremely Costly

5. Most people have a general *expectation* about *how costly* their sexual relationship "should be." Compared to this general expectation, they may feel that their sexual relationship is more costly, less costly, or as costly as it "should be." Based on your own expectation about how costly your sexual relationship with your partner "should be," how does your level of costs compare to that expectation?

1	2	3	4	5	6	7	8	9
Much Less Costly in Comparison								Much More Costly in Comparison

6. How does the level of *costs* that you incur in your sexual relationship with your partner compare to the level of costs that your partner gets from the relationship?

❑	❑	❑	❑	❑	❑	❑	❑	❑
My Costs Are Much Higher								My Partner's Costs Are Much Higher

Rewards/Costs Checklist (RCC)

Note to researcher: The presentation order of the Rewards Checklist and the Costs Checklist is counterbalanced across participants. The items are identical in both Checklists. The response options for the Rewards Checklist are **Reward** and **Not a Reward**. The response options for the Costs Checklist are **Cost** and **Not a Cost**.

Instructions

We will be asking you some more questions about your sexual relationship with your partner. Before answering them, it is important that you carefully read the following information.

When people think about their sexual relationship with their partner, most can give concrete examples of positive/pleasing things they like about their sexual relationship. These are **rewards**. Most people can also give concrete examples of negative/displeasing things they don't like about their sexual relationship. These are **costs**. For example, take *oral sex*.

Oral sex would be a **reward** if you feel that you engage in this sexual activity "just the right amount" and you enjoy it.

Oral sex would be a **cost** if you would like to engage in oral sex more often or less often than you do, or you do not enjoy it.

You will be asked to complete the same list twice. One time you will be asked to indicate whether each item in this list is generally a **reward** in your sexual relationship with your partner or **not a reward**. The other time you will be asked to indicate whether each item is a **cost** in your sexual relationship with your partner or **not a cost**.

Note that things can be both rewards and costs. For example, *oral sex* would be both a reward and a cost if you enjoy oral sex but want it more or less frequently. Further, some items may be neither rewards nor costs in your sexual relationship.

Rewards Checklist

This is a list of possible rewards and costs in your sexual relationship. Please indicate whether each item in this list is generally a **reward** in your sexual relationship with your partner or **not a reward**.

In brief, things that are positive, pleasing, or "just right" are rewards.

	Reward	Not a Reward
1. Level of affection you and your partner express during sexual activities	○	○
2. Degree of emotional intimacy (feeling close, sharing feelings)	○	○
3. Extent to which you and your partner communicate about sex	○	○
4. Variety in sexual activities, locations, times	○	○
5. Extent to which you and your partner use sex toys	○	○
6. Sexual activities you and your partner engage in to arouse each other	○	○

7.	How often you experience orgasm (climax)	○	○
8.	How often your partner experiences orgasm (climax)	○	○
9.	Extent to which you and your partner engage in intimate activities (e.g., talking, cuddling) after sex	○	○
10.	Frequency of sexual activities	○	○
11.	How much privacy you and your partner have for sex	○	○
12.	Oral sex: extent to which your partner stimulates you	○	○
13.	Oral sex: extent to which you stimulate your partner	○	○
14.	Physical sensations from touching, caressing, hugging	○	○
15.	Feelings of physical discomfort or pain during/after sex	○	○
16.	How much fun you and your partner experience during sexual interactions	○	○
17.	Who initiates sexual activities	○	○
18.	Extent to which you feel stressed/relaxed during sexual activities	○	○
19.	Extent to which you and your partner express enjoyment about your sexual interactions	○	○
20.	Extent to which you and your partner communicate your sexual likes and dislikes to each other	○	○
21.	Ability/inability to conceive a child	○	○
22.	Extent to which you and your partner engage in role-playing or act out fantasies	○	○
23.	How you feel about yourself during/after engaging in sexual activities with your partner	○	○
24.	Extent to which your partner shows consideration for your wants/needs/feelings	○	○
2.5	How your partner treats you (verbally and physically) when you have sex	○	○
26.	Having sex when you're not in the mood	○	○
27.	Having sex when your partner is not in the mood	○	○
28.	Extent to which you let your guard down with your partner	○	○
29.	Extent to which your partner lets their guard down with you	○	○
30.	Method of protection (from sexually transmitted infections and/or pregnancy) used by you and your partner	○	○
31.	Extent to which you and your partner discuss and use protection (from sexually transmitted diseases and/or pregnancy)	○	○
32.	How comfortable you and your partner are with each other	○	○
33.	Extent to which/way in which your partner influences you to engage in sexual activity	○	○
34.	Extent to which you and your partner argue after engaging in sexual activity	○	○
35.	Extent to which you and your partner are/are not sexually exclusive (i.e., have sex only with each other)	○	○
36.	How much time you and your partner spend engaging in sexual activities	○	○
37.	How easy it is for you to have an orgasm (climax)	○	○
38.	How easy it is for your partner to have an orgasm (climax)	○	○
39.	Extent to which your sexual relationship with your partner reflects or breaks down stereotypical gender roles (the way women and men are expected to behave sexually)	○	○
40.	How your partner responds to your initiation of sexual activity	○	○
41.	Being naked in front of your partner	○	○
42.	Your partner being naked in front of you	○	○
43.	Extent to which your partner talks to other people about your sex life	○	○
44.	Extent to which you and your partner read/watch sexually explicit material (e.g., erotic stories, pornographic videos)	○	○
45.	Pleasing/trying to please your partner sexually	○	○
46.	Extent to which sexual interactions with your partner make you feel secure in the relationship	○	○
47.	Extent to which you get sexually aroused	○	○
48.	Amount of spontaneity in your sex life	○	○
49.	Extent of control you feel during/after sexual activity	○	○
50.	Extent to which you engage in sexual activities that you dislike but your partner enjoys	○	○
51.	Extent to which you engage in sexual activities that you enjoy but your partner dislikes	○	○
52.	Worry that you or your partner will get a sexually transmitted infection from each other	○	○
53.	How confident you feel in terms of your ability to please your partner sexually	○	○

54.	Extent to which you and your partner engage in anal sex/anal play	○	○
55.	Your partner's ability to please you sexually	○	○
56.	Extent to which you think your partner is physically attracted to/sexually desires you	○	○
57.	Extent to which you are physically attracted to/sexually desire your partner	○	○
58.	Extent to which you and your partner are sexually compatible (i.e., well matched in terms of your sexual likes/dislikes)	○	○

Costs Checklist

This is a list of possible rewards and costs in your sexual relationship. Please indicate whether each item in this list is a **cost** in your sexual relationship with your partner or **not a cost**. In brief, things that are negative, displeasing, or "too little or too much" are costs.

Note to researcher: The same 58 checklist items are repeated here with response options Cost/Not a Cost.

The Orgasm Rating Scale

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The Orgasm Rating Scale (ORS) was developed to assess and quantify the psychological experience of orgasm in men and women and to address the lack of a comprehensive, theoretically based measure of orgasm experiences.

The ORS is a 40-item, self-report adjective-rating scale. Two subscales assess sensory and cognitive-affective dimensions, representing a two-dimensional model of the orgasm experience that has been previously theorized or investigated (e.g., Davidson, 1980; Mah & Binik, 2001; Warner, 1981). The *Sensory Dimension* represents the perception of physiological events (e.g., contractile sensations), whereas the *Cognitive-Affective Dimension* represents the subjective evaluations (e.g., satisfaction) and emotions (e.g., intimacy) associated with orgasm. Each dimension encompasses components that are represented by particular adjectives.

Development

To create the scale (see Mah & Binik, 2002), 141 adjectives were compiled from the available self-report literature on subjective experiences of orgasm. Pilot ratings reduced the pool to 60 adjectives, which formed the preliminary ORS. This version was evaluated in two cross-sectional studies of the two-dimensional model. In the initial study, 888 undergraduate (70.0%) and graduate (29.3%) students rated the adjectives to describe orgasm experiences attained through solitary masturbation and through sex with a partner. Exploratory factor analysis resulted in the 28 adjectives included in scoring; the remaining 12 adjectives in the current 40-item ORS denote other aspects of orgasm experiences (e.g., intensity, altered state of consciousness) but were not evaluated.

Response Mode and Timing

The ORS contains 40 adjectives, with 28 employed in subscale scoring. It is self-administered and can be used to assess orgasm experiences attained during either solitary masturbation or sex with a partner. Individuals are asked to recall their most recent orgasm experience attained within the specific sexual context and to rate each adjective on how well it describes the orgasm experience, from 0 (*does not describe it at all*) to 5 (*describes it perfectly*). The ORS requires approximately 5–10 minutes to complete.

Scoring

The ORS contains two subscales reflecting dimensions of orgasm experience. The *Sensory Dimension* encompasses six components: building sensations, flooding sensations, flushing sensations, shooting sensations, throbbing

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TABLE 1
Scoring Information for the Orgasm Rating Scale

ORS dimensions/components	Score calculation
Dimensions	Component numbers
Sensory	1 + 2 + 3 + 4 + 5 + 6
Cognitive-Affective	7 + 8 + 9 + 10
Components	Adjective numbers
1. Building Sensations	3 + 32
2. Flooding Sensations	11 + 12
3. Flushing Sensations	13 + 30
4. Shooting Sensations	27 + 31
5. Throbbing Sensations	21 + 34
6. General Spasms	22 + 28 + 35
7. Emotional Intimacy	4 + 17 + 18 + 33 + 37
8. Ecstasy	5 + 6 + 8 + 23
9. Pleasurable Satisfaction	14 + 20 + 26
10. Relaxation	19 + 24 + 29

sensations, and general spasms. The *Cognitive-Affective Dimension* includes four components: emotional intimacy, ecstasy, pleasurable satisfaction, and relaxation.

Total component scores are the summed ratings of a component's respective adjectives (e.g., the total score for the building-sensations component is the sum of the ratings for its adjectives, "building" and "swelling"). Total dimension scores are the summed total scores of a dimension's respective components (e.g., the total score for the cognitive-affective dimension is the sum of the total scores for the emotional-intimacy, ecstasy, pleasurable-satisfaction, and relaxation components; see Table 1). Higher scores indicate that the item describes its respective construct well.

Reliability

Our studies indicated high internal consistency for both men and women across sexual contexts (Cronbach's alphas = .88–.92; Mah & Binik, 2002). Other studies employing the ORS have reported good reliability for three dimensions, with the cognitive-affective dimension divided into separate cognitive and affective dimensions. A French version of the ORS demonstrated an overall Cronbach's alpha of .92 and alphas of .73–.90 for individual dimensions (Dubray, Gérard, Beaulieu-Prévost, & Courtois, 2017). A psychophysiological study of men with spinal cord injuries reported Cronbach's alphas of .91 for all three dimensions (Courtois et al., 2008).

Validity

In initial and cross-validation studies of the ORS, confirmatory factor analysis supported the two-dimensional model as a representation of the orgasm experience in both men and women across both sexual contexts (Mah & Binik, 2002). It was superior to a one-dimensional model but comparable to a three-dimensional model differentiating sensory, cognitive, and affective dimensions. Women reported significantly higher subscale scores than men, but differences were small except with the shooting-sensations component, on which men reported higher scores than women. The latter finding was interpreted to reflect male ejaculatory sensations. Similarly, sexual-context differences were observed, but only the difference on the emotional-intimacy component was substantial, with higher scores in the sex-with-partner context. This suggests the impact of the sex-with-partner context's psychosexual and emotional qualities on the orgasm experience.

Furthermore, within both sexual contexts, a greater number of ORS cognitive-affective components than sensory components predicted the pleasurable-satisfaction component as a fundamental aspect of orgasm experiences (Mah & Binik, 2005). Pleasure satisfaction was also associated with overall psychological intensity and physical intensity of orgasm, as well as relationship satisfaction within the sex-with-partner context. Results supported the importance of psychological and psychosocial factors in the orgasm experience.

A later study derived four types of female orgasm from our ORS data that differentiated "good-sex orgasms" from "not-as-good-sex orgasms" (King, Belsky, Mah, & Binik, 2011). The researchers theorized from an evolutionary perspective that female orgasm reflects a response to male partner quality and functions in sperm selection, but these mechanisms remain speculative. The findings of King et al. (2011) offer an intriguing contribution to validation of the ORS but require cross-validation.

The ORS has since appeared in other studies with university/community samples. Some studies treated the cognitive-affective dimension as two dimensions. One study demonstrated convergence between a French translation of the ORS and a measure of bodily and physiologic sensations of orgasm (Dubray et al., 2017). Another study found relationships between testosterone and estradiol levels and partnered and solitary orgasm experiences, respectively, but only in women (van Anders & Dunn, 2009). Researchers theorized that in women, testosterone relates more to the psychological experience of orgasm, whereas estradiol relates more to the physical experiences of orgasm. A psychophysiological study reported that number of ORS orgasmic sensations endorsed was correlated with greater orgasmic pleasure in men but not in women (Paterson, Jin, Amsel, & Binik, 2014).

Data from mostly small clinical studies are available. In a psychophysiological study of men with complete or incomplete spinal-cord lesions, a measure of physiological ejaculatory sensations detected group differences, whereas the ORS did not (Courtois et al., 2008). Researchers concluded that ejaculatory experiences in this clinical group involve physiological sensations associated more with autonomic dysreflexia than with orgasmic sensations. In another study of three men with spinal-cord injury trained on a sensory-substitution device that tracked masturbatory movements, ORS scores increased only in the sensory dimension and pleasurable-sensations subscale (Borisoff, Elliott, Hocaloski, & Birch, 2010). Finally, eight women who underwent device implantation for sacral-nerve

stimulation, to treat urinary tract symptoms or fecal incontinence, showed trends for higher post-implantation scores on a Dutch version of the ORS, suggesting slight improvement in orgasm experiences (van Voskuilen et al., 2012).

The findings from more recent studies (Dubray et al., 2017; Paterson et al., 2014; van Anders & Dunn, 2009), especially clinical studies (Borisoff et al., 2010; Courtois et al., 2008; van Voskuilen et al., 2012), are promising. However, studies did not establish the ORS two-factor structure in targeted groups or examine the impact of modifying the ORS's language or rating scale. Further psychometric evaluations with large healthy and clinical non-student samples are recommended. The ORS has not yet been validated for clinical use. Its potential in assessing orgasm difficulties or the efficacy of medical or psychotherapeutic interventions targeting such difficulties should be evaluated.

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Exhibit

Orgasm Rating Scale

Below is a list of words that might be used to describe the experience of orgasm. Different people may use different words to describe their personal experience, and so there is no "right" answer. After each word, shade in the circle under the number from 0 to 5 that best indicates how well that word describes your most recent orgasm experienced through [*indicate sexual context, either solitary masturbation or sex with a partner*], with 0 indicating the word does not describe your orgasm experience at all and 5 indicating that the word describes it perfectly.

Solitary-masturbation context

Recall to the best of your ability the most recent orgasm you experienced during solitary masturbation. This would include any sexual activity in which you engaged while alone.

	0 Does Not Describe It At All	1	2	3	4	5 Describes it Perfectly
1. absorbed	○	○	○	○	○	○
2. blissful	○	○	○	○	○	○
3. building	○	○	○	○	○	○
4. close	○	○	○	○	○	○
5. ecstatic	○	○	○	○	○	○
6. elated	○	○	○	○	○	○
7. engulfing	○	○	○	○	○	○
8. euphoric	○	○	○	○	○	○

9. exciting	○	○	○	○	○	○
10. exploding	○	○	○	○	○	○
11. flooding	○	○	○	○	○	○
12. flowing	○	○	○	○	○	○
13. flushing	○	○	○	○	○	○
14. fulfilling	○	○	○	○	○	○
15. hot	○	○	○	○	○	○
16. immersing	○	○	○	○	○	○
17. loving	○	○	○	○	○	○
18. passionate	○	○	○	○	○	○
19. peaceful	○	○	○	○	○	○
20. pleasurable	○	○	○	○	○	○
21. pulsating	○	○	○	○	○	○
22. quivering	○	○	○	○	○	○
23. rapturous	○	○	○	○	○	○
24. relaxing	○	○	○	○	○	○
25. rising	○	○	○	○	○	○
26. satisfying	○	○	○	○	○	○
27. shooting	○	○	○	○	○	○
28. shuddering	○	○	○	○	○	○
29. soothing	○	○	○	○	○	○
30. spreading	○	○	○	○	○	○
31. spurting	○	○	○	○	○	○
32. swelling	○	○	○	○	○	○
33. tender	○	○	○	○	○	○
34. throbbing	○	○	○	○	○	○
35. trembling	○	○	○	○	○	○
36. uncontrolled	○	○	○	○	○	○
37. unifying	○	○	○	○	○	○
38. unreal	○	○	○	○	○	○
39. warm	○	○	○	○	○	○
40. wild	○	○	○	○	○	○

Sex-with-partner context

Recall to the best of your ability the most recent orgasm you experienced during sex with a partner. This would include any sexual activity with your partner in which you had orgasm while your partner was present. To the best of your memory, how did you have this orgasm with your partner?

○ through intercourse (vagina/anal/other)
○ through oral stimulation from partner
○ through manual stimulation from partner
○ through manual stimulation from myself
○ other (describe briefly on the line below, e.g., clitoral stimulation/vaginal intercourse)

_____

	0 Does Not Describe It At All	1	2	3	4	5 Describes it Perfectly
1. absorbed	○	○	○	○	○	○
2. blissful	○	○	○	○	○	○
3. building	○	○	○	○	○	○
4. close	○	○	○	○	○	○
5. ecstatic	○	○	○	○	○	○
6. elated	○	○	○	○	○	○

7. engulfing	○	○	○	○	○	○
8. euphoric	○	○	○	○	○	○
9. exciting	○	○	○	○	○	○
10. exploding	○	○	○	○	○	○
11. flooding	○	○	○	○	○	○
12. flowing	○	○	○	○	○	○
13. flushing	○	○	○	○	○	○
14. fulfilling	○	○	○	○	○	○
15. hot	○	○	○	○	○	○
16. immersing	○	○	○	○	○	○
17. loving	○	○	○	○	○	○
18. passionate	○	○	○	○	○	○
19. peaceful	○	○	○	○	○	○
20. pleasurable	○	○	○	○	○	○
21. pulsating	○	○	○	○	○	○
22. quivering	○	○	○	○	○	○
23. rapturous	○	○	○	○	○	○
24. relaxing	○	○	○	○	○	○
25. rising	○	○	○	○	○	○
26. satisfying	○	○	○	○	○	○
27. shooting	○	○	○	○	○	○
28. shuddering	○	○	○	○	○	○
29. soothing	○	○	○	○	○	○
30. spreading	○	○	○	○	○	○
31. spurting	○	○	○	○	○	○
32. swelling	○	○	○	○	○	○
33. tender	○	○	○	○	○	○
34. throbbing	○	○	○	○	○	○
35. trembling	○	○	○	○	○	○
36. uncontrolled	○	○	○	○	○	○
37. unifying	○	○	○	○	○	○
38. unreal	○	○	○	○	○	○
39. warm	○	○	○	○	○	○
40. wild	○	○	○	○	○	○

Orgasmic Consistency Scale (formerly the Female Orgasm Scale)

Alexandra McIntyre-Smith[4]
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This scale assesses the consistency of female orgasm during partnered sexual activities (e.g., intercourse, oral stimulation, self-stimulation with partner present); and overall satisfaction with orgasm frequency and quality.

The original Female Orgasm Scale is composed of seven items. Five items inquire about the frequency of orgasm during different sexual activities: (a) intercourse, (b) intercourse with additional direct clitoral stimulation, (c) hand/manual stimulation of the clitoris and/or genitals by a partner, (d) self-stimulation of the clitoris and/or genitals in the presence of a partner, and (e) oral stimulation. Respondents indicate the percentage of time

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they experience orgasm during each of these activities on an 11-point scale in 10 percent increments ranging from "0%" to "100%." Respondents are also provided with the option, *Does not apply to me (I do not have sexual interactions involving . . .)* to allow the "0%" response option to identify respondents who engage in the type of stimulation described in the item but do not experience orgasm from it. Two other items assess perceived satisfaction with the (a) number and (b) quality of orgasms experienced during sexual activity with a partner. These items are rated on a 7-point scale ranging from *very satisfied* to *very unsatisfied*.

Development

Scale development followed an iterative process, whereby items were developed and refined over a series of three studies (McIntyre-Smith, 2010). An initial pool of 17 items was developed and administered to 198 female undergraduate students. Items were subject to individual item analyses and exploratory factor analyses. Nine items were deleted due to poor empirical performance or poor conceptual overlap with the construct, and 5 new items were written. The 13 new/remaining items were then administered to a second sample of 242 female undergraduate participants and items were subjected to item analyses and exploratory factor analyses. Six items were deleted, and 2 additional items were written. The 9 items were administered to 211 female undergraduate participants and responses were subjected to item analyses and test–retest reliability analyses. Seven items were retained for the final scale.

Decision-making regarding item-deletion was based on the following scale-development guidelines (see Netemeyer, Bearden, & Sharma, 2003; Streiner & Norman, 2008): (a) range restriction problems (i.e., more than 50% of the sample endorsed a single response option, low standard deviations), (b) poor inter-item correlations with two or more scale items ($r < .30$), (c) poor corrected item-total correlations ($r < .30$), (d) high cross-loadings on non-target factors (> .35 or more), (e) low percentage of variance accounted for within items (i.e., poor communalities; < .30), (f) poor item wording as judged by scale developers, (g) redundancy with other items, and (h) poor conceptual overlap (i.e., item was judged to be too dissimilar from other items and/or to poorly reflect the construct).

Sampling was conducted with three groups of female undergraduate students, aged 17 to 49 (Ms = 18.83–19.24, SDs = 2.67–3.38), who were heterosexually active (i.e., they reported having sexual intercourse with a male partner at least twice per month). As this scale was developed based on responses from undergraduate female participants, it is most appropriate for use with this population. Future studies examining the use of this measure with additional populations are needed.

Response Mode and Timing

Respondents are provided with the scale and instructions and are asked to complete the survey on their own, and with as much privacy as possible. Sampling for the purposes of scale development was conducted using the Internet. Paper-and-pencil administration of the scale requires 2 to 5 minutes.

No particular time frame was assigned to the scale (i.e., it provides a global overview of a women's orgasm experience rather than being limited to the past 4 weeks, current partner, etc.). This approach was chosen to allow the scale to be applicable to a broad range of temporal and relationship contexts. If one were interested in limiting the use of the scale to a specific time frame or sexual relationship (e.g., current partner), the scale could be prefaced with additional instructions specifying this constraint. For example, Kohut and Fisher (2013) administered the Orgasmic Consistency Scale in a study of female undergraduate students, and specified responses should pertain to the 7-day period immediately preceding completion of the questionnaire while Marshall and colleagues did not use a specified time frame in their application of the measure (Marshall, Morris, & Rainey, 2014). The Orgasmic Consistency Scale was strongly correlated with the Orgasm subscale of the Female Sexual Function Index (Rosen et al., 2000; $r = .710$), which measures orgasmic function over the past 4 weeks. This provides preliminary support for the consistency of female orgasmic experience as measured by the Orgasmic Consistency Scale, and for tailoring the scale to a specific time frame.

Scoring

Examine the number of responses marked *Does not Apply to Me*. These responses can be coded either as missing data or as 0, depending on the rationale of the researcher and use of the scale. Score Items 1 5 as: 0% = 0, 10% = 1, 20% = 2 . . . 100% = 10. Score Items 6–7 as: *Very Unsatisfied* = 1 . . . *Very Satisfied* = 7.

Because Items 1 though 5 are essentially keyed on a 10-point scale (i.e., there is no conceptual equivalent to the 0% response option on the 7-point scale for Items 6–7), and the rest of the items are coded on a 7-point scale, items should be weighted in the following manner: multiply Items 1–5 by 7; multiply Items 6–7 by 10.

Calculate the average score or the total score for all items. Higher scores indicate greater orgasm consistency and satisfaction. Calculate subscale scores if desired (i.e., *Orgasm from Clitoral Stimulation*—Items 2–5; *Satisfaction with Orgasm*—Items 6–7). When calculating subscale scores, items do not need to be weighted within a given subscale because the response options are the same for all items (e.g., Items 2–5 are answered on a 7-point scale).

Reliability

Internal consistency of the Orgasmic Consistency Scale was good in all three studies (*N*s = 198, 242, and 211; α = .84–.86), and for both subscales: *Orgasm from Clitoral Stimulation* (α = .81–.82) and *Satisfaction with Orgasm* (α = .72–.90; McIntyre-Smith, 2010). Corrected item-total correlations ranged from *r* = .414–.773 for the total scale, and from *r* = .57–.81 for the subscales. Inter-item correlations ranged from *r* =.19–.61 for the total scale, and from *r* = .43–.68 for both subscales. Four-week test–retest reliability was excellent for the total scale (*r* = .82) and both subscales (*r* = .62–.78).

Validity

As expected, the Orgasmic Consistency Scale was highly correlated (*r* = .710) with the Orgasm subscale of the Female Sexual Function Index (FSFI; Rosen et al., 2000), providing evidence of convergent validity. The current scale was also correlated with the total FSFI score and the other subscales scores (*r* = .201–.547), except for the Desire subscale. The *Satisfaction with Orgasm* subscale was correlated with the Satisfaction subscale of the FSFI (*r* = .306), providing some evidence of convergent validity. The Orgasmic Consistency Scale, subscales, and individual items were not correlated with the Marlowe-Crowne Social Desirability Scale (MCSD; Crowne & Marlowe, 1964) or with measures of depression and anxiety (Henry & Crawford, 2005), providing evidence of discriminant validity and freedom from response bias.

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Exhibit

Orgasmic Consistency Scale

The following questions ask about your sexual experiences (such as sexual activities with a partner). You are asked to rate each item on the scale provided. Please check off one box per item to indicate your response.

1. How often do you have an orgasm from vaginal penetration only (no direct clitoral stimulation) during intercourse with a partner?

○	○	○	○	○	○	○	○	○	○	○
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

○ Doesn't apply to me (i.e., I do not have sexual interactions involving vaginal penetration only during intercourse with a partner)

2. How often do you have an orgasm from intercourse with a partner that includes both vaginal penetration and direct clitoral stimulation?

○	○	○	○	○	○	○	○	○	○	○
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

○ Doesn't apply to me (i.e., I do not have sexual interactions involving vaginal penetration and simultaneous clitoral stimulation)

3. How often do you have an orgasm from *hand/manual* stimulation of your genitals/clitoris by a partner?

○	○	○	○	○	○	○	○	○	○	○
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

○ Doesn't apply to me (i.e., I do not have sexual interactions involving manual stimulation of the genitals/clitoris with a partner)

4. How often do you have an orgasm when you yourself manipulate or rub your own genitals/clitoris when you are with a partner?

○	○	○	○	○	○	○	○	○	○	○
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

○ Doesn't apply to me (i.e., I do not have sexual interactions where I self-manipulate my own genitals/clitoris when I am with a partner)

5. How often do you have an orgasm from *oral* stimulation of your genitals/clitoris by a partner?

○	○	○	○	○	○	○	○	○	○	○
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

○ Doesn't apply to me (i.e., I do not have sexual interactions involving oral stimulation of the genitals/clitoris with a partner)

6. In general, how satisfied…unsatisfied are you with the number of orgasms that you have during sexual activity with a partner?

○ Very Satisfied
○ Moderately Satisfied
○ Slightly Satisfied
○ Neither Satisfied nor Unsatisfied
○ Slightly Unsatisfied
○ Moderately Unsatisfied
○ Very Unsatisfied

7. In general, how satisfied…unsatisfied are you with the quality or experience of orgasm that you have during sexual activity with a partner?

○ Very Satisfied
○ Moderately Satisfied
○ Slightly Satisfied
○ Neither Satisfied nor Unsatisfied
○ Slightly Unsatisfied
○ Moderately Unsatisfied
○ Very Unsatisfied

Clitoral Self-Stimulation Scale

Alexandra McIntyre-Smith[5]
William A. Fisher, *Department of Psychology*

This scale assesses the frequency of women's self-stimulation of the clitoris and genitals in the presence of a partner, as well as their attitudes and affective reactions to such self-stimulation. The scale is composed of five items measuring attitudinal and affective states in relation to self-stimulation of the clitoris and genitals in the context of sexual interaction with a partner, and one item assessing the frequency of self-stimulation in

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such situations. Response options vary, reflecting the content of the item.

Development

Scale development followed an iterative process, whereby items were developed and refined over a series of three studies (McIntyre-Smith, 2010). An initial pool of 18 items was developed and administered to 198 female undergraduate students. Items were subject to individual item analyses and exploratory factor analyses. Ten items were deleted due to poor empirical performance and/or poor conceptual overlap with the construct. The eight remaining items and four new items were provided to 16 graduate students who rated the items for clarity and provided feedback and suggestions for wording changes (see Hinkin, 1998 and Streiner & Norman, 2008, for evidence for the use of students as item judges). Recommendations to improve item wording were considered if they were suggested by two or more people; wording changes were made to three items. The 12 items were then administered to a second sample of 242 female undergraduate participants and items were subjected to item analyses and exploratory factor analyses. Five items were deleted and two additional items were written. The seven items were administered to 211 female undergraduate participants and responses were subjected to item analyses and test–retest reliability analyses. Six items were retained for the final scale.

Decision-making regarding item-deletion was based on the following scale development guidelines (see Netemeyer, Bearden, & Sharma, 2003; Streiner & Norman, 2008): (a) range restriction problems (i.e., more than 50% of the sample endorsed a single response option, low standard deviations), (b) poor inter-item correlations with two or more scale items ($r < .30$), (c) poor corrected item-total correlations ($r < .30$), (d) high cross-loadings on non-target factors (> .35 or more), (e) low percentage of variance accounted for within items (i.e., poor communalities; < .30), (f) low clarity ratings by expert raters (mean < 5.5 on a 7-point scale), (g) poor item wording as judged by expert raters, (h) redundancy with other items, (i) poor conceptual overlap (i.e., item was judged to be too dissimilar from other items and/or to poorly reflect the construct).

Sampling was conducted with three groups of female undergraduate students aged 17 to 49 (M = 18.83–19.24, SD = 2.67–3.38, Ns = 198, 242, 211) who were heterosexually active (i.e., they reported having sexual intercourse with a male partner at least twice per month). As this scale was developed based on responses from undergraduate female participants, it is most appropriate for use with this population. Future studies examining the use of this measure with additional populations are needed.

Response Mode and Timing

Respondents are provided with the scale and instructions and are asked to complete the survey on their own and with as much privacy as possible. The scale was administered using the Internet for the purpose of scale development research. Paper-and-pencil administration of the scale requires 2–5 minutes.

This scale was designed to measure individual differences in attitudinal, affective and behavioural components of the tendency to engage in self-stimulation of the clitoris and genitals in the context of sexual interaction with a partner. No particular time frame or relationship context was assigned to the scale. This approach was chosen so that the scale assesses individual difference dispositions more broadly, rather than being limited to a particular relationship or temporal context. If one were interested in limiting the use of the scale to a specific time frame or sexual relationship (e.g., current partner), the scale could be prefaced with additional instructions specifying this constraint. It should be noted, however, that the scale was not designed or validated with this purpose in mind.

Scoring

See Table 1 for scoring information for Items 1–5.

Score Item 6 as:

0 = 0%

1 = 1–25%

2 = 26–50%

3 = 51–75%

4 = 76–99%

5 = 100%

TABLE 1
Scoring Table for Items 1–5 of the Clitoral Self-Stimulation Scale

Score As	Item 1 Good	Item 2 Important	Item 3 Exciting	Item 4 Embarrassing	Item 5 Easy
1	Very bad	Very unimportant	Strongly disagree	Strongly disagree	Very difficult
2	Moderately bad	Moderately unimportant	Moderately disagree	Moderately disagree	Moderately difficult
3	Slightly bad	Slightly unimportant	Slightly disagree	Slightly disagree	Slightly difficult
4	Neither good nor bad	Neither important nor unimportant	Neither agree nor disagree	Neither agree nor disagree	Neither easy nor difficult
5	Slightly good	Slightly important	Slightly agree	Slightly agree	Slightly easy
6	Moderately good	Moderately important	Moderately agree	Moderately agree	Moderately easy
7	Very good	Very important	Strongly agree	Strongly agree	Very easy

Because Item 6 is essentially keyed on a 5-point scale (i.e., there is no conceptual equivalent to the 0 percent response option on the 7-point scales for Items 1–5), and the rest of the items are coded on a 7-point scale, items should be weighted in the following manner: multiply Items 1 through 5 by 5; multiply Item 6 by 7.

Calculate the average score or the total score for all items. Higher scores indicate a greater proclivity for engaging in self-stimulation of the clitoris or genitals during sexual interaction with a partner.

Calculate subscale scores if desired. The *Attitudes Towards Clitoral Self-Stimulation* scale includes Items 1, 2, and 5. The *Affective Reactions to Clitoral Self-Stimulation* includes Items 3 and 4. When calculating subscale scores, items do not need to be weighted within a given subscale because the response options are the same for all items (e.g., they are all answered on a 7-point scale).

Reliability

Internal consistency of the total scale was good in all three studies (α = .825–.865, *N*s = 198, 242, 211; McIntyre-Smith, 2010). Four-week test–retest reliability was good for the total scale (*r* = .839) and both subscales (*r* = .739–.766). The internal consistency of the *Attitudes Towards Clitoral Self-Stimulation* subscale was excellent in two of the three studies (α = .814–.865) and was adequate in the third study (α = .716), providing good evidence of internal consistency, particularly for a three-item measure. The internal consistency of the *Affective Reactions to Clitoral Self-Stimulation* Subscale was adequate for two of the three studies (α = .701–.709) but was less desirable in the third study (α = .588), though still acceptable for a two-item subscale.

Validity

Clitoral self-stimulation is a sexual behaviour that may not usually be part of the typical sexual script (Gagnon, 1977), and may require a certain degree of openness to sexual experience. Evidence for the convergent validity of the Clitoral Self-Stimulation Scale was explored using measures of openness to a broad range of sexual experiences (*N*s = 198 and 242). The Clitoral Self-Stimulation Scale and subscale scores were correlated with the Sexual Opinion Survey measure of erotophobia-erotophilia (SOS; Fisher, Byrne, White, & Kelley, 1988; *r* = .39–.48), which is the tendency to respond to sexual stimuli with negative-to-positive affect, and avoidant-to-approach behaviour. SOS scores were calculated without two of the 21 items that inquire about self-stimulation ("Manipulating my genitals would probably be an arousing experience" and "Masturbation can be an exciting experience") to reduce inflated estimates of the correlation between the Clitoral Self-Stimulation Scale and erotophobia-erotophilia. Other evidence of convergent validity includes the correlation of the total score and subscale scores with the Sociosexual Inventory (Simpson & Gangestad, 1991; *r* = .15–.22), a measure of respondents' willingness to engage in casual, uncommitted sexual relationships; and with frequency of intercourse with a dating partner (*r* = .20–.27) and a casual sexual partner (*r* = .53–.66), as well as frequency of masturbation (*r* = .33–.49). The total scale and subscales were not correlated with the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) or with measures of depression and anxiety (Henry & Crawford, 2005), providing evidence of discriminant validity and freedom from response bias.

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Exhibit

Clitoral Self-Stimulation Scale

Instructions: The following questions ask about your thoughts and feelings concerning your sexual experiences and sexual activities with a partner. You are asked to rate each item on the scale provided. Please check off one box per item to indicate your response.

Stimulating myself (i.e., massaging my genitals/clitoris) to help me have an orgasm during intercourse with a partner would be:

1. **Good**

❑	❑	❑	❑	❑	❑	❑
Very Good	Moderately Good	Slightly Good	Neither Good nor Bad	Slightly Bad	Moderately Bad	Very Bad

2. **Important**

❑	❑	❑	❑	❑	❑	❑
Very Unimportant	Moderately Unimportant	Slightly Unimportant	Neither Important nor Unimportant	Slightly Important	Moderately Important	Very Important

3. **Exciting**

❑	❑	❑	❑	❑	❑	❑
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree

4. **Embarrassing**

❑	❑	❑	❑	❑	❑	❑
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree

5. **Easy**

❑	❑	❑	❑	❑	❑	❑
Very Difficult	Moderately Difficult	Slightly Difficult	Neither Easy nor Difficult	Slightly Easy	Moderately Easy	Very Easy

6. *When having sex with a partner, how **often** do you stimulate your clitoris to orgasm?*

- ☐ 0% of the time
- ☐ 1–25% of the time
- ☐ 26–50% of the time
- ☐ 51–75% of the time
- ☐ 76–99% of the time
- ☐ 100% of the time

Sexual Pleasure Scale

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Sexual pleasure can be understood as the enjoyment one derives from sexual interaction and as a sexual right; however, there is no validated measure of sexual pleasure. The present study provides an initial validation of a Sexual Pleasure Scale (SPS) among cisgendered, heterosexual people. The SPS allows individuals to subjectively

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define pleasure for themselves while assessing the extent to which they experience pleasure from sexual activities, sexual intimacy, and sexual intercourse. We chose to validate the SPS because it seems easy to understand, takes less than a minute to answer, and it has had promising psychometric properties in earlier work. We aimed to determine if the three items of the SPS were a reliable measure of dyadic sexual pleasure. We propose this measure will be useful in sexual health education and clinical settings; for example, to assess the efficacy and efficiency of treatment plans aimed at improving sexual health, or to determine the possible impact of medication and treatment for people who are ill or undergoing treatment for a medical condition.

Development

A set of three items (comprising the SPS) developed and used by Sanchez, Crocker and Boike (2005) were tested as a unidimensional scale to measure sexual pleasure. We studied the SPS in a subgroup of people diagnosed with sexual dysfunction ($N = 89$) and a non-clinical community sample ($N = 188$) of Portuguese men and women (Pascoal, Sanchez, Raposo, & Pechorro, 2016).

The factor structure of the Portuguese language version of the SPS was assessed with principal components analysis (PCA) using the original scale items. Items with standardized loading above .30 were retained. In the clinical and non-clinical sample, all items had loadings above .30, and thus none were excluded. The total of variance explained was 79 percent in the non-clinical sample and 86 percent in the clinical sample.

We used a receiver operating characteristic (ROC) curve to verify the accuracy of the SPS to evaluate sexual pleasure differences to differentiate clinical sample of a non-clinical sample. The ROC curve showed an area under the curve of .82, $p < .001$ and 95% CI [.76, .88], an indicator of strong discrimination value. This result supports the use of the SPS in clinical contexts.

Response Mode and Timing

Participants can answer in paper and pencil format or on a computer. The participants assess the extent of sexual pleasure obtained through sexual relationships, sexual activities, and sexual intimacy, respectively, using a scale from 1 (*not pleasurable at all*) to 7 (*very pleasurable*). On average, it takes 1 minute to complete.

Scoring

There are no reverse scored items. The three items can be summed to create a global measure of sexual pleasure. Total scores may range from 3 to 21, with higher scores indicating higher levels of sexual pleasure.

Reliability

The scale's Cronbach's alpha was .87 in the non-clinical sample and .92 in the clinical sample.

Validity

The SPS was significantly correlated with male's sexual functioning as measured by the International Index of Erectile Function (IEFF; Rosen et al., 1997; $r = .37$, $p < .001$) as well as with women's sexual functioning as measured by the Female Sexual Function Index (FSFI; Rosen et al., 2000; $r = .30$, $p < .001$) and with sexual satisfaction as measured by the Global Measure of Sexual Satisfaction (Lawrance & Byers, 1995) in men ($r = .47$, $p < .001$) and women ($r = .24$, $p = .011$) in the non-clinical sample. In the clinical sample, the SPS was significantly correlated with male's sexual functioning as measured by the IIEF ($r = .51$, $p < .001$) but not with women's sexual functioning as measured by the FSFI ($r = .10$, $p > .05$) and was significantly correlated with sexual satisfaction in men ($r = .64$, $p < .001$) and women ($r = .69$, $p = .011$). Overall, these results establish convergent validity of the SPS. As evidence of divergent validity, the SPS was not significantly correlated with a global measure of body dissatisfaction (Pascoal et al., 2016).

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Exhibit

Sexual Pleasure Scale

Focus on your current relationship. Think about your sex life in the past 4 weeks. Please signalize the option that better illustrates your experience.

	1 Not Pleasurable	2	3	4	5	6	7 Very Pleasurable
1. I find sexual intercourse	○	○	○	○	○	○	○
2. I find sexual activities	○	○	○	○	○	○	○
3. I find sexual intimacy	○	○	○	○	○	○	○

Quality of Sex Inventory

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The 24-item and 12-item versions of the Quality of Sex Inventory (QSI; Shaw & Rogge, 2016) measure sexual satisfaction (i.e., global positive evaluations) and sexual dissatisfaction (i.e., global negative evaluations) as separate and distinct constructs. From a conceptual standpoint, the QSI was developed to offer researchers scales focused on global evaluations of sexual relationships, avoiding more heterogeneous items commonly found on existing scales that assess distinguishable constructs like sexual desire and sexual dysfunction. From a measurement standpoint, the QSI scales were developed to offer researchers and clinicians psychometrically optimized scales, yielding the maximum information with the fewest possible items (for seeing differences between individuals at one wave and for detecting meaningful change within individuals across time), thereby offering notably greater levels of precision and power over existing scales (see Shaw & Rogge, 2016).

Development

To create the QSI, the authors gave a pool of 139 potential items to a sample of 3,060 online respondents (65% female, 75% Caucasian, average age of 27.0 years, 13% completed high school or less) in sexually active romantic relationships (47% currently living with partners, 54% exclusively dating, 8.3% engaged, 29% married, 22% currently dissatisfied in their relationships; Shaw & Rogge, 2016). To create the item pool, the authors drew 65 items from 4 widely cited and unidimensional measures of sexual satisfaction: the 25-item Index of Sexual Satisfaction (ISS; Hudson, Harrison, & Crosscup, 1981), the 5-item Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995), the 24-item Pinney Sexual Satisfaction Inventory (PSSI; Pinney, Gerrard, & Denney, 1987), and the 11-item Young Sexual Satisfaction Scale (YSSS; Young, Denny, Luquis, & Young, 1998). To further augment the item pool, the authors wrote another 74 items crafted to be clear and straightforward representations of their conceptual definitions focused on global positive and negative evaluations of sexual relationships.

An Exploratory Factor Analysis (EFA; using principle axis factoring with oblimin rotation) on the entire item pool revealed a robust factor representing 81 sexual satisfaction items and a separate factor representing 31 sexual dissatisfaction items. The EFA results also revealed a third factor representing sexual desire items from the ISS, PSSI, and YSSS scales (e.g., "*I wish my partner initiated sex more often*" and "*My partner does not want sex when I do*"), strongly suggesting that those items are indeed measuring a distinct construct from sexual satisfaction and dissatisfaction. Thus, for researchers and clinicians interested in the

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theoretically focused assessment of sexual satisfaction and dissatisfaction (i.e., global positive and negative evaluations of a sexual relationship), those sexual desire items would represent a source of contaminating or confounding variance in the ISS, PSSI, and YSSS scales. The sexual desire items were also found to display markedly strong differential item functioning across males and females, highlighting that their inclusion in a sexual satisfaction measure would likely create spurious gender differences on the final scale. To avoid this potential source of conceptual contamination and gender bias, only the items cleanly loading on the sexual satisfaction and sexual dissatisfaction factors were considered for inclusion in the QSI.

To create the 24-item QSI, we used Item Response Theory (IRT; Hambleton, Swaminathan, & Rogers, 1991) on the 81 sexual satisfaction items to select the 12 items offering the greatest information and power for detecting differences between individuals on sexual satisfaction. We conducted a separate IRT analysis on the 31 sexual dissatisfaction items to select the 12 most effective dissatisfaction items. To create shorter versions of those subscales (for use across a broader range of research contexts in which the length of assessment might be limited), we further identified the six most effective items within each of those subscales to create and validate a 12-item version of the QSI.

Response Mode and Timing

Each item is rated on a 6-point Likert scale: 0 (*Not at all true*), 1 (*A little true*), 2 (*Somewhat true*), 3 (*Mostly true*), 4 (*Very true*), and 5 (*Completely true*). The items were written to be self-contained and therefore no special instructions are required for participants other than setting the desired time-frame. The QSI was developed using a time-frame of the last 2 weeks, to encourage participants to consider any recent shifts in sexual satisfaction and dissatisfaction when completing it. This served to focus the scale on state-like variations in sexual quality, maximizing the utility of the scale for longitudinal researchers interested in tracking change over time on the order of weeks or months. Researchers interested in using the QSI in daily-diary studies or studies using event-based sampling of frequent behavior could simply shift this time frame to be appropriate for their purposes (e.g., using time frames like "*in the last day*," "*in the last few hours*," or "*during this most recent sexual encounter with your partner*"). The 24-item version of the scale takes roughly 2 minutes to complete and the 12-item version takes roughly 1 minute.

Scoring

For all items, responses are given values on a 6-point scale and those responses are given values from 0 to 5 as detailed above. The 12-item *Sexual Satisfaction* scale is made up of Items 1 through 12. The shorter 6-item version of that scale is made up of Items 1 through 6. To create a *Sexual Satisfaction* total, you simply sum the responses across those 12 or 6 items so that higher scores indicate higher levels of sexual satisfaction. The 12-item *Sexual Dissatisfaction* scale is made up of Items 13 through 24 whereas the shorter 6-item version of that scale is made up of Items 13 through 18. To create a *Sexual Dissatisfaction* total, you simply sum the responses across those 12 or 6 items so that higher scores indicate higher levels of sexual dissatisfaction.

Reliability

In the development sample, the QSI *Sexual Satisfaction* subscales demonstrated excellent reliability of measurement across time as they yielded high (.89 and .87 for the 12-item and 6-item scales respectively) 2-month test–retest correlations within the 419 follow-up participants reporting no overall change in sexual quality. In fact, the QSI *Sexual Satisfaction* subscales offered significantly higher test–retest correlations than the other sexual satisfaction measures examined. Results in the development sample also suggested that the QSI subscales maintained high levels of internal consistency (i.e., Cronbach's alphas ranging from .92 to .97 for the *Sexual Satisfaction* subscales and from .88 to .94 for the *Sexual Dissatisfaction* subscales) across a broad range of demographic groups: gender groups, couples with different living arrangements, racial/ethnic groups, relationship stages, education levels, and sexual orientations. Taken together, these results suggest that the QSI scales should function well across a broad range of future samples.

Validity

The QSI *Sexual Satisfaction* subscales demonstrated excellent convergent validity in the development sample with the other measures of sexual satisfaction examined (i.e., the ISS, the PSSI, the YSSS, and the GMSEX). The QSI *Sexual Dissatisfaction* subscales also demonstrated notable discriminant validity, suggesting that they represent a new concept in this area, worthy of being studied as a separate outcome (Shaw & Rogge, 2016). The QSI *Sexual Satisfaction* subscales also replicated the theoretically and empirically well-established pattern of correlations with a set of closely related yet conceptually distinct measures in the nomological net of theory and results surrounding the construct of sexual satisfaction in the current literature (e.g., physical affection, frequency of sexual activity, sociosexual orientation, sex drive, and negative conflict behavior).

By demonstrating a pattern of correlations with these anchor constructs of the nomological net virtually identical to those obtained with the other measures of sexual satisfaction examined in the development study, the QSI *Sexual Satisfaction* subscales demonstrated high construct validity, suggesting that they continue to assess the same underlying construct that is measured by the most widely used existing scales in this area. IRT measurement invariance analyses in that sample suggested that, in contrast to scales like the ISS, the PSSI, and the YSSS which were shown to contain gender-biased items, the QSI subscales operate comparably across men and women as

well as across different relationship stages (e.g., dating vs. engaged vs. married), yielding scores that could be directly compared across those groups. The analyses further suggested that the QSI subscales offered greater precision of measurement and corresponding power for detecting cross-sectional group differences than the four other sexual satisfaction measures examined. Finally, longitudinal responsiveness to change analyses in the 869 respondents completing a 2-month follow-up assessment suggested that the QSI subscales also offered greater power for detecting change over time than the other measures examined.

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Exhibit

Quality of Sex Inventory

Thinking of the last 2 weeks …

	0 Not at all true	1 A little true	2 Somewhat true	3 Mostly true	4 Very true	5 Completely true
1. My sex life is fulfilling.	○	○	○	○	○	○
2. I am happy with my sex life with my partner.	○	○	○	○	○	○
3. My partner really pleases me sexually.	○	○	○	○	○	○
4. I am satisfied with our sexual relationship.	○	○	○	○	○	○
5. I am happy with the quality of sexual activity in our relationship.	○	○	○	○	○	○
6. Sexual activity with my partner is fantastic.	○	○	○	○	○	○
7. I am happy with my partner as a lover.	○	○	○	○	○	○
8. Sexual activity with my partner is rewarding.	○	○	○	○	○	○
9. Sexual activity with my partner is enjoyable.	○	○	○	○	○	○
10. My sex life is very exciting.	○	○	○	○	○	○
11. Sexual activity with my partner is everything I could hope for.	○	○	○	○	○	○
12. Sex is fun for my partner and me.	○	○	○	○	○	○
13. Sexual activity with my partner is not fun.	○	○	○	○	○	○
14. Sexual activity with my partner is a turn off.	○	○	○	○	○	○
15. Sexual activity with my partner is not worth the time or effort.	○	○	○	○	○	○
16. I do *not* enjoy sexual activity with my partner.	○	○	○	○	○	○
17. Sexual activity with my partner leaves me empty.	○	○	○	○	○	○
18. Sexual activity with my partner is not very exciting	○	○	○	○	○	○
19. I would rather not engage in sexual activity with partner.	○	○	○	○	○	○
20. I don't look forward to sexual activity with my partner.	○	○	○	○	○	○
21. My sex life with my partner has become somewhat dull.	○	○	○	○	○	○
22. I am tired of engaging in sexual activity with my partner.	○	○	○	○	○	○
23. Sexual activity with my partner leaves me feeling distant and alone.	○	○	○	○	○	○
24. I am very disappointed with my sex life with my partner.	○	○	○	○	○	○

22 Sadism and Masochism

MTC Sadism Scale

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The Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013) has defined sexual sadism as recurrent and intense sexual arousal from the physical or psychological suffering of another person. Sexual sadism was conceptualized as if sadists were fundamentally different from non-sadists; however, recent studies concerned with latent structure suggest that sadism represents a dimensional construct rather than a categorical entity (Knight, Sims-Knight, & Guay, 2013; Longpré, Guay, Knight, & Benbouriche, 2018; Mokros, Schilling, Weiss, Nitschke, & Eher, 2014). The Massachusetts Treatment Center Sadism Scale (MTCSS; Longpré, Guay, & Knight, 2019) was developed in this context.

The MTCSS was developed to measure severe sexual sadism through behavioral markers. Although sexual sadism can be theoretically present among everyone but on a different level (for more details see Longpré et al., 2018), the MTCSS was developed to measure non-consensual severe sexual sadism among adult sexual offenders.

Development

The database used to develop the MTCSS was provided by Dr. Raymond A. Knight for second-hand analyses. The MTCSS was developed on a sample of 486 adult male sexual offenders composed of rapists, child molesters and mixed offenders (i.e., victims who were both above and below sixteen years old). Twenty seven indicators were selected in the MTC database to assess six dimensions that are theoretically related to sadism (for more details see Longpré et al., 2019). They were selected on the basis of their theoretical relevance through consensus ratings. The 27-indicator version was used in a recent study scrutinizing the latent structure of sadism with taxometric analyses (Longpré et al., 2018).

In an attempt to improve the psychometric properties of the MTCSS, classical test theory and two-parameter item response theory analyses (IRT) were applied. The final version of the MTCSS is composed of fifteen indicators that respect both empirical and theoretical considerations. The final fifteen indicators collapse into 5 dimensions that are: *Control and Domination, Aggression, Cruelty, Torture*, and *Insertion of Object*. These behaviors are considered as core features of sexual sadism in the literature.

Response Mode and Timing

For the codification of the MTCSS, professionals must consider both the crime scene behaviors of the index offense and those of previous offenses. All relevant offenses provide useful information for scoring items before reaching a final conclusion. File information (i.e., offenders' criminal records, police records, court testimony, treatment reports, and developmental history) must be considered as sufficient source of information; however, previous charges that did not lead to a conviction should not be acknowledged.

Scoring

All indicators are coded as either absent (0) or present (1). Therefore, scores can range from 0 to 15, with higher scores indicating greater level of sadism. An indicator had to be present in one of the sexual offenses to be coded as present. Most MTCSS indicators should have direct equivalents (e.g., the victim was tied) in the official records; however, in some instances, professionals may have to use proxy variables to code particular domains. For example, it is sometimes difficult to determine the difference between instrumental and expressive aggression. Therefore, a combination of facts stated in files and professional judgment can be used.

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Reliability

The MTCSS 15-indicator version showed a good internal consistency (KR-20 = .78). Moreover, no indicators correlated negatively with the total score. Finally, no indicators correlated negatively with other indicators and inter-indicator correlations ranged between .11 and .44 (for more details see Longpré et al., 2019).

Validity

Longpré, Guay, and Knight (2016; $N = 486$) investigated the discriminant and convergent validity of the MTCSS. Their results showed that rapists and mixed offenders scored significantly higher than child molesters on the MTCSS, $F(485) = 22.09$; $p < .001$. Longpré et al. (2016) also found that the severe behaviors in the MTCSS were more common among rapists and mixed offenders than child molesters, which is consistent with the literature. These results indicate that the MTCSS's 15-indicator is effective to discriminate between rapists and child molesters on both the total score and the severity of the behaviors.

The convergent validity of the MTCSS's 15-indicator version was measured with the Sexual Sadism Scale (SeSaS; Mokros, Schilling, Eher, & Nitschke, 2012; Nitschke, Osterheider, & Mokros, 2009), the actual gold standard in the dimensional assessment of sexual sadism. The Pearson product-moment correlation (r) between the MTCSS and the SeSaS was positive and significant ($r = .66$, $p < .001$), indicating a good convergence between the two dimensional measures of sadism.

Two-parameter IRT difficulty parameters revealed that the majority of the indicators included in the scale were considered difficult, which indicates that the MTCSS mostly assesses the severe end of the continuum. Although no indicators fell below the threshold of zero, the distribution of the MTCSS's indicators on the spectrum of difficulty was consistent with the literature. Analyses also revealed that fourteen of the fifteen indicators manifested good discriminating power. The discrimination parameters represent an indicator's ability to differentiate among offenders with varied levels of sadism. Two studies (i.e., Knight et al., 2013; Stefanska, Nitschke, Carter, & Mokros, 2019) have conducted two-parameter IRT analyses on sadism scales. Although not all the indicators in the MTCSS were present in prior studies, the reported patterns are similar.

Conclusion

The DSM nosological classification has gone as far as it can go, and the complexity of psychological disorders are unlikely to be adequately represented and measured by diagnostic categories that attempt to create nonexistent joints along continuous distributions. Results indicate that the MTCSS has good psychometric properties and should be considered as a possible alternative to the current DSM diagnoses.

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Exhibit

MTC Sadism Scale

1. Victim tied
   - ○ Code "0" if no mention was made or it was specifically stated that the subject did not tie the victim(s).
   - ○ Code "1" if the subject tied the victim(s) in any manner, with any object.

2. Instrumental aggression: brutal or damaging beating
   - ○ Code "0" if no mention was made or it was specifically stated that the subject did not hurt or beat the victim(s) in order to subdue the victim, or to force compliance.
   - ○ Code "1" if it is noted that the subject did hurt or beat the victim(s) in order to subdue the victim, or to force compliance. Behaviors such as slapping, squeezing or punching can be used to infer the presence of instrumental aggression.
3. Expressive aggression: brutal or damaging beating before the sexual assault
   - ○ Code "0" if no mention was made or it was specifically stated that the subject did not hurt or beat the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim before the sexual assault.
   - ○ Code "1" if it is noted that the subject did hurt or beat the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim before the sexual assault. One indication of expressive aggression is that the offender used more force than what seemed to be necessary to subdue or make the victim comply. Cuts, black eyes, long-term and permanent damage can be used to infer the presence of expressive aggression.
4. Expressive aggression: brutal or damaging beating after the sexual assault
   - ○ Code "0" if no mention was made or it was specifically stated that the subject did not hurt or beat the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim after the sexual assault.
   - ○ Code "1" if it is noted that the subject did hurt or beat the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim after the sexual assault. One indication of expressive aggression is that the offender used more force than what seemed to be necessary to subdue or make the victim comply. Cuts, black eyes, long-term and permanent damage can be used to infer the presence of expressive aggression.
5. Kicking
   - ○ Code "0" if no mention was made or it was specifically stated that the subject did not kick the victim(s).
   - ○ Code "1" if mention was made or it was specifically stated that the subject kicked the victim(s).
6. Cuts, bruises and abrasions
   - ○ Code "0" if no mention was made or it was specifically stated that the victim(s) did not receive any cuts, bruises or abrasions.
   - ○ Code "1" if the victim(s) received cuts, bruises or abrasion which were the result of the subject's attack or were an indirect result of the attack or if it can be reasonably inferred that the victim(s) received cuts, bruises or abrasions from the fact that the victim(s) was attacked by the subject.
7. Burns
   - ○ Code "0" if no mention was made or it was specifically stated that the subject did not burn the victim(s).
   - ○ Code "1" if mention was made or it was specifically stated that the subject burned the victim(s).
8. Medical problems requiring physician
   - ○ Code "0" if no mention was made or it was clear that no medical attention was necessary.
   - ○ Code "1" if serious injuries to the victim(s) resulted, due to subject's attack, which would normally require a doctor's care or attention, or if it is specifically mentioned that the victim(s) were given medical aid for a serious injury, or if the victim(s) was killed.
9. Cruelty to animals
   - ○ Code "0" if there was no mention of cruelty to animals by the subject.
   - ○ Code "1" if it is noted that the subject performed cruel or sadistic acts upon animals.
10. Cruelty to people
    - ○ Code "0" if there was no mention of cruelty to others by the subject.
    - ○ Code "1" if it is noted that the subject performed cruel or sadistic acts upon others.
11. Sadistic assaults on victim's genitals/breasts
    - ○ Code "0" if no mention was made or it was specifically stated the subject did not attack the victim's (or victims') genitals (vagina, penis, or anus) or breasts.
    - ○ Code "1" if at any time during the offense the subject attacked the victim's (or victims') genitals (vagina, penis, or anus) or breasts in such a way as to purposely inflict pain and/or injury.

12. Expressive aggression: Uncontrollable rage and anger leading to mutilation before the sexual assault
    - Code "0" if no mention was made or it was specifically stated that the subject did not mutilate the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim before the sexual assault.
    - Code "1" if it is noted that the subject did mutilate the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim before the sexual assault.
13. Expressive aggression: Uncontrollable rage and anger leading to mutilation after the sexual assault
    - Code "0" if no mention was made or it was specifically stated that the subject did not mutilate the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim after the sexual assault.
    - Code "1" if it is noted that the subject did mutilate the victim(s) as a result of the offender's uncontrollable rage and anger or as a need to be in control of the victim after the sexual assault.
14. Anal insertion of object
    - Code "0" if no mention was made or if it was specifically stated that the subject did not penetrate the victim's (or victims') anus with his fingers, hand or with an object during the offense.
    - Code "1" if it is noted that the subject penetrated the victim's (or victims') anus with either his fingers, hand or with an object at any time during the offense.
15. Vaginal insertion of object
    - Code "0" if no mention was made or if it was specifically stated that the subject did not penetrate the victim's (or victims') vagina with his fingers, hand or with an object during the offense.
    - Code "1" if it is noted that the subject penetrated the victim's (or victims') vagina with either his fingers, hand or with an object at any time during the offense.

Sadomasochism Checklist

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The Sadomasochism Checklist (SMCL; Weierstall, & Giebel, 2017) was developed to provide a comprehensive self-rating tool for the assessment of an individual's attraction to sadomasochism, covering both dominant and submissive practices. The SMCL contains two 24-item scales, the *SMCL Dominance Scale* and the *SMCL Submission Scale*. For each item, participants can select one response for prior experience with the respective practice and one response for pleasure gain. The items of the dominance and submission scale assess the same fantasies and practices. The items are either administered in the active voice (*SMCL Dominance Scale*) or in the passive voice (*SMCL Submission Scale*). Each scale covers six different groups of common SM play: *soft play* (e.g., blindfolding or rough intercourse), *domination* (e.g., role play or verbal humiliation), *beatings* (e.g., spanking or whipping), *toys* (e.g., clamps or plugs), *breath control* (e.g., strangling or face-sitting), and *body fluids* (e.g., feces or urinating). It is an easy to administer self-rating tool that has proven its reliability and validity in the online and paper-pencil versions. Depending on the diagnostic question, either prior experience with the practices or pleasure gain from each practice or both can be assessed.

Development

For the initial item generation, different kinds of sadomasochistic practices were collected while investigating the scientific literature (e.g., Alison, Santtila, Sandnabba, & Nordling, 2001; Ernulf & Innala, 1995), webpages from SM communities, and personal communication with members of the BDSM scene. The items were administered to a sample of members from the BDSM scene as well as

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controls with no particular interest in SM. The total sample size was 652. The age range was 18 to 60 years (M = 39, SD = 12). Participants were assigned to one of the four groups of "dominants," "submissives," "switches," or a "conventional group," depending on their preferred role in BDSM play. There were 136 participants in the group of dominants (26 females), 230 in the group of submissives (170 females), 155 in the group of switches (i.e., people who enjoyed both sides and switched the sadomasochistic roles; 74 females) and 131 participants (75 females) in the conventional group. Both scales were analyzed separately to improve the fit of the two scales for the respective target populations. Principal component analysis was conducted to investigate the potential underlying factor structure.

For the *SMCL Submission Scale*, a principal component analysis indicated a single factor structure. The first factor accounted for 29 percent of the scale variance. The scree test criterion indicated a clear break between the first and the second factor (Cattell, 1978). The Kaiser–Meyer–Olkin criterion (KMO) of .85 indicated that the data contained sufficient shared variance for factor analysis. All items had statistically significant ($p < .01$) corrected item-total correlations (M = .47, SD = .10). Similarly, the mean factor loading of all 24 items onto the first factor was .53 (SD = .12).

For the *SMCL Dominance Scale*, the scree test criterion for the initial un-rotated factor solution also favored a single-factor structure. In a principal component analysis, the first factor accounted for 29 percent of the variance. The result of the KMO measure was .84. As for the Submission scale, all items had significant corrected item-total correlation (M = .48, SD = .12; all ps < .01) and had sufficient factor loadings onto the first factor (M = .60, SD = .14).

Subsequent varimax rotation for a six-factor solution based on the number of factors with eigenvalue > 1 in both scales accounted for 64 percent of the scale variance in both scales. However, an unequal factor structure between the two scales was identified. Thus, even if the items could be grouped into the six dimensions of *soft play, domination, beatings, toys, breath control* and *body fluids*, several items had to be assigned to different dimensions across the scales. We consequently strongly recommend sticking to the single-factor solution.

As participants had to rate both their experience with the respective practices as well as the related pleasure gain, the relation between the two scoring options was investigated, calculating Spearman rank coefficients item-wise. Kruskal–Wallis tests were used to analyze group differences in the pleasure gain across the study groups of dominants, submissives, switches, and the conventional group. For multiple comparisons between scores across groups, Mann–Whitney U-tests with Bonferroni-corrected p-values were chosen.

Response Mode and Timing

For the assessment of the prior experience, participants can choose one out of three response options: no experience, masturbation fantasy, or experience in real life. For the assessment of pleasure gain, participants have to rate their personal sexual pleasure gain from each practice on a 5-point scale ranging from 0 (*not at all*) to 4 (*extremely*) from their current perspective. The completion time of the complete scale is about eight minutes.

Scoring

Scoring of the SMCL involves calculating the sum score for pleasure gain for the two scales separately (i.e., the 24 items from the *Dominance Scale* and the 24 items from the *Submission Scale*). The scoring of the prior experience with the practices does not follow a predefined algorithm. Our analyses have demonstrated that those participants who report a higher pleasure gain from the respective practices also tend to integrate them more often in the masturbation fantasies or their sexual activities. Thus, for research that aims to assess the participants' attraction to sadomasochism, the use of the pleasure gain scores provides the most convenient approach.

Reliability

The reliabilities of the *SMCL Submission Scale* (Cronbach's alpha = .96) and the *SMCL Dominance Scale* (Cronbach's alpha = .89) were sufficient. Due to the single-factor structure, no further coefficients for subscales had to be computed.

Validity

The relation between the ordinal-scaled engagement in the respective practices and the related pleasure gain was analyzed item-wise. In both scales, participants who reported a higher pleasure gain also reported a higher engagement in the corresponding behavior (*SMCL Submission Scale*: Mean r_s = .61, SD = .11; all ps < .001; *SMCL Dominance Scale*: Mean r_s = .55, SD = .21; all ps <.001). There were also significant differences in pleasure gain for dominant and submissive practices across the four groups in both scales (*SMCL Submission scale*; Kruskal–Wallis test: $\chi^2(3) = 409.56$, $p < .001$, $\eta p^2 = .64$; *SMCL Dominance scale*; Kruskal–Wallis test: $\chi^2(3) = 338.58$, $p < .001$, $\eta p^2 = .52$); that is, participants from the groups also rated the pleasure gain related to dominant or submissive practices in accordance with the group assignment.

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Exhibit

Sadomasochism Checklist

Dominance Scale

In the following you find a list of different sadmasochistic preferences. Please indicate for every item (1) if you have already used it as a masturbation fantasy or ever tried it with your partner and (2) how much it relates to your sexual pleasure.

	Prior Experience			Pleasure Gain				
	Not at all	Masturbation/ fantasy	Tried out	0 Not at all	1	2	3	4 Extremely
1. Clawing, pinching or biting your partner during sexual play.	○	○	○	○	○	○	○	○
2. Stimulating your partner with light beatings.	○	○	○	○	○	○	○	○
3. Having rough or hard sexual intercourse with your partner.	○	○	○	○	○	○	○	○
4. Spanking your partner.	○	○	○	○	○	○	○	○
5. Torment your partner using wax or branding.	○	○	○	○	○	○	○	○
6. Using clamps, weights, clips or other devices that cause pain on your partner's body.	○	○	○	○	○	○	○	○
7. Whipping, paddling or flogging your partner.	○	○	○	○	○	○	○	○
8. Torturing your partner's genitals.	○	○	○	○	○	○	○	○
9. Putting plugs or other toys into your partner's body that cause pain to her/him.	○	○	○	○	○	○	○	○
10. Giving your partner commands how to please you.	○	○	○	○	○	○	○	○
11. Having the dominant role in bondage and discipline role play.	○	○	○	○	○	○	○	○
12. Blindfolding your partner.	○	○	○	○	○	○	○	○
13. Verbally humiliating your partner.	○	○	○	○	○	○	○	○
14. Tying up your partner with chains, ropes, belts etc. for total devotion.	○	○	○	○	○	○	○	○
15. Placing your partner into a cage or cellar for confinement of the submissive.	○	○	○	○	○	○	○	○
16. Forcing your partner to please you against her/his will.	○	○	○	○	○	○	○	○
17. Humiliating your partner with others.	○	○	○	○	○	○	○	○
18. Displaying your partner to others as submissive.	○	○	○	○	○	○	○	○
19. Forcing your partner to swallow your sperm/vaginal secretion.	○	○	○	○	○	○	○	○
20. Urinating on your partner.	○	○	○	○	○	○	○	○
21. Forcing your partner to ingest feces or vomit.	○	○	○	○	○	○	○	○
22. Controlling your partner's breath, e.g. by facesitting, smothering or toys.	○	○	○	○	○	○	○	○
23. Strangling or suffocating your partner.	○	○	○	○	○	○	○	○
24. Making your partner become unconscious, e.g. by using a bag.	○	○	○	○	○	○	○	○

Submission Scale

In the following you find a list of different sadmasochistic preferences. Please indicate for every item (1) if you have already used it as a masturbation fantasy or ever tried it with your partner and (2) how much it relates to your sexual pleasure.

	Prior Experience				Pleasure Gain				
		Not at all	Masturbation/ fantasy	Tried out	0 Not at all	1	2	3	4 Extremely
1.	Being clawed, pinched or bitten by your partner during sexual play.	○	○	○	○	○	○	○	○
2.	Being stimulated by your partner with light beatings.	○	○	○	○	○	○	○	○
3.	Receiving rough or hard sexual intercourse with your partner.	○	○	○	○	○	○	○	○
4.	Getting spanked by your partner.	○	○	○	○	○	○	○	○
5.	Being tormented by your partner using wax or branding.	○	○	○	○	○	○	○	○
6.	Getting clamps, weights, clips or other devices that cause pain used on your body.	○	○	○	○	○	○	○	○
7.	Getting whipped, paddled or flogged by your partner.	○	○	○	○	○	○	○	○
8.	Having your genitals tortured by your partner.	○	○	○	○	○	○	○	○
9.	Getting plugs or other toys put into your body that cause pain.	○	○	○	○	○	○	○	○
10.	Receiving commands of your partner on how to please her/him.	○	○	○	○	○	○	○	○
11.	Having the submissive role in bondage and discipline role play.	○	○	○	○	○	○	○	○
12.	Being blindfolded by your partner.	○	○	○	○	○	○	○	○
13.	Being verbally humiliated by your partner.	○	○	○	○	○	○	○	○
14.	Getting tied up by your partner with chains, ropes, belts etc. for total devotion.	○	○	○	○	○	○	○	○
15.	Being placed by your partner into a cage or cellar for confinement of the submissive.	○	○	○	○	○	○	○	○
16.	Being forced by your partner to please her/him against your will.	○	○	○	○	○	○	○	○
17.	Being humiliated by your partner together with others.	○	○	○	○	○	○	○	○
18.	Being displayed as subordinate to others by your partner.	○	○	○	○	○	○	○	○
19.	Being forced by your partner to swallow her/his sperm/vaginal secretion.	○	○	○	○	○	○	○	○
20.	Having your partner urinate on you.	○	○	○	○	○	○	○	○
21.	Being forced by your partner to ingest feces or vomit.	○	○	○	○	○	○	○	○
22.	Having your breath controlled by your partner, e.g. by facesitting, smothering or toys.	○	○	○	○	○	○	○	○
23.	Being strangled of suffocated by your partner.	○	○	○	○	○	○	○	○
24.	Being made unconscious by your partner, e.g. by using a bag.	○	○	○	○	○	○	○	○

Sexual Sadism Scale

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The Sexual Sadism Scale (SeSaS) is a structured professional judgment instrument for assessing non-consensual, severe sexual sadism in offenders. Part I consists of 11 items related to crime-scene behavior. Part II comprises three items that capture additional biographical information. The higher the Part I subtotal (based on offense behavior), the more likely an offender will fulfill the diagnostic criteria for sexual sadism. The Part II items allow checking the plausibility of such a hypothetical diagnosis based on additional information.

Development

The items of Part I refer to crime scene behavior and were tested empirically by Nitschke, Osterheider, and Mokros (2009) and by Mokros, Schilling, Eher, and Nitschke (2012). The items of Part II, referred to as biographical items, do not exclusively deal with crime scene actions. The items of Part II were contributed by Schilling, Ross, Pfäfflin, and Eher (2010).

Marshall, Kennedy, Yates, and Serran (2002) found an insufficiently low level of interrater agreement (Cohen's $\kappa = .14$) for the clinical diagnosis of sexual sadism among 15 forensic-psychiatric experts who assessed 12 case vignettes. With respect to these results, Marshall and Hucker (2006) suggested that a dimensional assessment of sexual sadism based on crime scene behavior would achieve better reliability and validity. Marshall and Hucker (2006) put forward a list of 17 criteria that they called the *Sexual Sadism Scale*. These seventeen indicators were based on the criteria that the forensic-psychiatric experts had deemed relevant for the diagnosis in the study by Marshall et al. (2002).

Using a non-metric variant of item response theory (IRT), Nitschke et al. (2009) empirically derived an 11-item cumulative scale from the list of criteria by Marshall and Hucker (2006). Nitschke et al. (2009) relied on the case files of a hundred forensic-psychiatric patients (half of whom were diagnosed as sexual sadists) from a high-security hospital in Germany. Nitschke et al. added one item (insertion of objects into the victim's bodily orifices) that had not been included in the original list of criteria by Marshall and Hucker (2006) but proved to be scalable along with the other items. The 11-item set derived by Nitschke et al. (2009) represents Part I of the SeSaS (i.e., crime scene actions). Three biographical items (now Part II of the SeSaS) were subsequently added based on an empirical study from Austria (Schilling et al., 2010).

Response Mode and Timing

The SeSaS is an observer rating instrument based on the review of correctional/forensic files. The SeSaS can only be used with individuals who are charged with or were convicted of at least one criminal offense. The assessment does not require participation on behalf of the person being evaluated. The time to complete the SeSaS varies greatly depending on the amount of file information available.

Scoring

The SeSaS items are dichotomous (yes/no) and coded with 1 and 0, respectively. The Part I items are scored based on offense-related information (e.g., from a review of pertinent files), whereas the Part II items may also be scored based on other sources (e.g., interview information, collateral data). The crime scene information for Part I is derived from all previous offenses, not only the index offense. The Part I items are summed into a subtotal, with a value of 4 or above considered indicative of sexual sadism. The Part II items provide further evidence for or against such a diagnostic hypothesis.

Reliability

In the development study (Nitschke et al., 2009) the mean Cohen's κ across items was .86 in a sub-sample of 25 cases, with the κ values for single items ranging from .65 to 1.00 (only the Part I items were considered in that study). In a sample of 20 cases rated independently by five raters, the intra-class correlation coefficient (single measure, absolute agreement) for the Part I subtotal was estimated at .91, reflecting an excellent level of agreement (Mokros, Schilling, Weiss, Nitschke, & Eher, 2014).

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In the same study, the weighted κ coefficients for the Part II items ranged from .46 to .56 (i.e., moderate agreement). Good levels of observer agreement were also found in two recent studies (Mauzaite, Sauter, Seewald, & Dahle, 2017; Stefanska, Nitschke, Carter, & Mokros, 2019).

Reliability of the SeSaS Part I was estimated from satisfactory (Stefanska et al., 2019) or good (Pflugradt & Allen, 2011) to excellent levels (Nitschke et al., 2009). The reliability estimates in the three studies aforementioned were .76, .85, and .93, respectively. All three estimates represent IRT-based coefficients. The samples comprised 350 sexual murderers from England and Wales (Stefanska et al., 2019), 90 female sexual offenders from the US (Pflugradt & Allen, 2011), and 100 forensic-psychiatric patients from Germany (Nitschke et al., 2009). The value reported by Nitschke et al. (2009) may be overly high, however, due to an oversampling of sexual sadists in the development sample.

Validity

The SeSaS items are a subset of criteria considered as suitable indicators of nonconsensual, or severe, sexual sadism according to a survey of experts by Marshall et al. (2002). The SeSaS items were derived from the full list of criteria from said survey empirically (Nitschke et al., 2009; Schilling et al., 2010).

The factor structure was analyzed using confirmatory factor analysis (CFA) in two studies based on samples of adult male sexual offenders from Austria (Mokros, Schilling, Eher, & Nitschke, 2012 [N = 105]; Mokros et al., 2014 [N = 1,020]) and in another study based on a sample of sexual murderers from England and Wales (N = 350; Stefanska et al., 2019). The CFA results of the latter study, in particular, accord well with the bipartite structure of the instrument. More specifically, the Part I items can be considered as a unidimensional scale — a notion supported by IRT analyses (Mokros et al., 2012; Nitschke et al., 2009; Pflugradt & Allen, 2011; Stefanska et al., 2019).

In terms of convergent validity, Longpré, Guay, and Knight (2019) noted a strong correlation (r = .66, N = 486) of the SeSaS Part I subtotal with a conceptually similar index based on offense behavior. There was no substantial correlation, however, with erectile arousal toward sexually violent stimuli assessed by penile plethysmography ($r \leq .11$, N = 72; Longpré, Brouillette-Alarie, & Proulx, 2018). As far as discriminant validity is concerned, a comparison with the Psychopathy Checklist-Revised (PCL-R; Hare, 2003) showed that sexual sadism, as measured with the SeSaS, and psychopathy, as measured with the PCL-R, were distinct constructs (Mokros, Osterheider, Hucker, & Nitschke, 2011).

For the Part I subtotal, there were moderate (Longpré et al., 2018) to substantial correlations (Eher et al., 2016; Mauzaite et al., 2017) with clinical diagnoses of sexual sadism (i.e., *DSM-IV-TR*). Across four studies of sexual offenders from Austria, Germany, and the US (N = 591; 15.2% women), sensitivity and specificity were estimated at 95 percent and 99 percent, respectively (Nitschke, Mokros, Osterheider, & Marshall, 2013). The association with violent (including sexual) re-offending, however, was weak (Eher et al., 2016). There was no incremental validity in predicting violent (including sexual) re-offending beyond customary risk assessment instruments.

Acknowledgement

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Exhibit

Sexual Sadism Scale

Part I—Analysis of crime scene actions (coded based on official files about previous convictions or current charges)

1. **Sexual arousal during the crime scene behaviors**: Subject admitted to feeling sexually aroused or victim statements/witness accounts/crime scene details such as trace evidence make this apparent.

   ○ Yes
   ○ No

2. **Exertion of power, control, dominance**: Exaggerated degree of intimidation of the victim on behalf of the perpetrator. Markedly higher level of power exertion than necessary for a sexual offense.

   ○ Yes
   ○ No

3. **Torturing the victim(s)**: Used methods that aim toward the infliction of pain (physical torture) or actions (including verbal behavior) suitable to elicit extreme fear (psychological torture).

   ○ Yes
   ○ No

4. **Degrading or humiliating behavior toward the victim**: Subject showed behavior (verbal or physical) expected to evoke feelings of shame or disgust.

   ○ Yes
   ○ No

5. **Mutilation of sexual areas of the victim's body**: Mutilation of vulva/vagina, penis or breasts in terms of (partial) amputation/disfiguration through considerable physical force, pre- or post-mortem.

   ○ Yes
   ○ No

6. **Mutilation of other parts of the victim's body**: As no. 5 above, if other body parts than vulva/vagina, penis or breasts were involved.

   ○ Yes
   ○ No

7. **Excessive physical violence**: Level of violence exceeded the level necessary to control the victim.

   ○ Yes
   ○ No

8. **Insertion of objects into victim's bodily orifices**: Attempted or accomplished insertion of an object into vagina, anus or urethra of a victim, either pre- or post-mortem.

   ○ Yes
   ○ No

9. **Ritualistic behavior**: Carrying out peculiar actions, sequences, patterns or circumstances resembling a screenplay was important to the perpetrator during the offense.

   ○ Yes
   ○ No

10. **Confinement of the victim/spatial coercion**: Subject deprived the victim of his/her liberty beyond the immediate time and situation of sexual activity.

    ○ Yes
    ○ No

11. **Taking trophies**: Taking personal (identifiable) objects belonging to the victim for him/herself. Taking parts of victim's body (such as hair) or recordings (photographs, videos, audio) are subsumed.

    ○ Yes
    ○ No

Part II—Biographical variables

1. **Planful conduct**: The subject planned the offense in advance. (Also coded based on official files about previous convictions or current charges only.)

   ○ Yes
   ○ No

2. **Indications of sadistic acts in the past beyond listed offenses**: Positive information of cruelty to human beings or to animals.

   ○ Yes
   ○ No

3. **Arousability through sadistic phantasies or acts**: Self-reported or observer-rated indication of pleasurable arousal on behalf of the subject by witnessing acts of torture, humiliation, fear or hurt of others.

   ○ Yes
   ○ No

Attitudes About Sadomasochism Scale

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The 23-item Attitudes About Sadomasochism Scale (ASMS; Yost, 2010) assesses stereotypical and prejudicial attitudes about individuals involved in consensual, sexual sadomasochism. The full scale score may be used, but the scale also includes four subscales: *Socially Wrong* (the belief that SM behavior is morally wrong and socially undesirable); *Violence* (linking SM to violence against an unwilling partner); *Lack of Tolerance* (suggesting that SM cannot be an acceptable form of sexuality, even among willing partners); and *Real Life* (the belief that SM practitioners carry their SM interests into their daily lives).

Sadomasochism (SM), in this context, refers to the consensual sexual activities of an adult subculture that practices bondage, discipline, domination, submission, sadism, masochism, or kink as part of their sexuality (Weinberg, Williams, & Moser, 1984). Many SM activists claim that identifying as a sadomasochist is similar to identifying as a

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lesbian, gay man, or bisexual, in that SM is an identity that defines their sexuality (Taylor & Ussher, 2001). Others argue that SM is best conceptualized as simply a set of sexual practices or activities (Langdridge, 2006). In either case, prejudicial attitudes about such individuals are well-documented (Wright, 2006).

SM practitioners have reported bias from psychotherapists when seeking therapy (Kolmes, Stock, & Moser, 2006), and have reported fear of bias from police officers when considering whether to report sexual assaults (Haviv, 2016). Furthermore, anti-SM bias is evident in the legal system, demonstrated by custody cases in which a parent's involvement in SM is used as evidence of unfit parenting (Klein & Moser, 2006), and raids in which police charge consenting adults with lewd behavior, nudity, and assault for engaging in SM in semiprivate settings (Ridinger, 2006). It should not be surprising that SM practitioners report a fear of disclosing their sexuality to others (Bezreh, Weinberg, & Edgar, 2012; Wright, 2006).

Development

The ASMS was developed using a sample of 213 participants. Fifty-eight items were administered and explored through factor analysis. After deleting items that lacked variance or loaded highly on multiple factors, an exploratory factor analysis yielded four subscales: *Socially Wrong; Violence; Lack of Tolerance*; and *Real Life*. Confirmatory factor analysis using a second sample of 258 participants further supported the structure of the ASMS, with fit indices above .90 indicating that the four-structure model adequately fit the data.

Response Mode and Timing

Response options range on a Likert-type scale from 1 (*Disagree Strongly*) to 7 (*Agree Strongly*). The instrument can be completed in 10 minutes.

Scoring

So that higher scores indicate negative attitudes about SM or SM practitioners, the four items phrased in a positive direction (18, 19, 20, 21) are reverse coded. Then, items within each subscale are averaged (*Socially Wrong*: Items 1–12; *Violence*: Items 13–17; *Lack of Tolerance*: Items 18–21; and *Real Life*: Items 22 and 23). A full scale score can be computed by averaging all 23 items.

Reliability

Reliability analyses were conducted using all 471 participants. Cronbach's alpha for each subscale ranged from .78 to .92, indicating very good internal consistency for each subscale.

Validity

Validation analyses using all 471 participants showed that the ASMS demonstrated good concurrent validity at the subscale level by correlating in expected ways with four established scales. All subscales were positively correlated with prejudicial attitudes about lesbians and gay men, and with a measure of sexual conservatism, suggesting that prejudicial SM attitudes are an extension of more general sex-negative attitudes. The *Socially Wrong* subscale was most strongly correlated with a measure of right-wing authoritarianism, which would be expected given that the items in this subscale are closely related to moral judgments and society's role in maintaining order. Lastly, the only subscale significantly correlated with a measure of rape myths was *Violence*, showing that participants who supported inaccurate beliefs about rape (such as blaming the victim) also believed inaccurate statements associating SM with rape.

A multiple regression analysis showed that over half of the variance in the ASMS (58%) remained unexplained by the four established scales (prejudice against lesbians and gay men, sexual conservatism, right-wing authoritarianism, rape myth acceptance), indicating that the ASMS measures specific attitudes about SM that cannot be accounted for by social and sexual conservatism alone. Thus, the ASMS captures a set of attitudes specific to SM that do not overlap with already-developed attitudinal scales.

Finally, the ASMS demonstrated validity through its ability to discriminate between groups of participants: the more participants knew about SM prior to this study, the more positive their attitudes, consistent with the idea that knowledge creates a more accurate perception of SM practices. Also, participants who identified themselves as involved in SM had more positive attitudes, consistent with social psychological research on in-group favoritism showing that group members perceive others in their group in positive terms, even if the group is stigmatized in the broader society (Frable, Platt, & Hoey, 1998). Lastly, participants who had a friend who was involved in SM also had more positive attitudes, consistent with the contact hypothesis of stigma reduction (Allport, 1954), which explains that positive attitude change occurs when intergroup contact takes place under optimal circumstances.

Summary

The ASMS is a multidimensional measure of prejudicial attitudes about sadomasochism. It is a useful tool to examine the prevalence of anti-SM attitudes, particularly among populations that come into contact with SM practitioners in settings where discriminatory attitudes could have serious

consequences. Educational programs could then specifically address the anti-SM bias held by psychotherapists, lawyers, judges, and the police. More broadly, this measure is a useful tool for sex researchers and social scientists interested in discrimination against sexual minorities.

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Exhibit

Attitudes About Sadomasochism Scale

Use the following definitions when considering your responses:

- *Sadomasochism*: sexual practices that involve dominance and submission (the appearance that one person has control over the other), sometimes involve role-playing (such as Master–Slave or Teacher–Student), and are always consensual (all partners participate willingly and voluntarily)
- *Sadomasochist*: someone who deliberately uses physical stimulation (possibly pain) and/or psychological stimulation and control to produce sexual arousal and to achieve sexual pleasure
- *Dominant*: someone who always or mostly is the person in control during an SM sexual encounter
- *Submissive*: someone who always or mostly is the person who does not have control during an SM sexual encounter

	1 Disagree Strongly	2 Disagree Moderately	3 Disagree Mildly	4 Neither Agree nor Disagree	5 Agree Mildly	6 Agree Moderately	7 Agree Strongly
1. Sadomasochists just don't fit into our society.	○	○	○	○	○	○	○
2. Practicing sadomasochists should not be allowed to be members of churches or synagogues.	○	○	○	○	○	○	○
3. Sadomasochism is a perversion.	○	○	○	○	○	○	○
4. Sadomasochistic behavior is just plain wrong.	○	○	○	○	○	○	○
5. Sadomasochism is a threat to many of our basic social institutions.	○	○	○	○	○	○	○
6. I think sadomasochists are disgusting.	○	○	○	○	○	○	○
7. Sadomasochistic activity should be against the law.	○	○	○	○	○	○	○
8. Parents who engage in SM are more likely to physically abuse their children.	○	○	○	○	○	○	○
9. Sadomasochism is an inferior form of sexuality.	○	○	○	○	○	○	○
10. If I was alone in a room with someone I knew to be a Dominant, I would feel uncomfortable.	○	○	○	○	○	○	○

11. SM rarely exists in a psychologically healthy individual.	○	○	○	○	○	○	○
12. If I was alone in a room with someone I knew to be a Submissive, I would feel uncomfortable.	○	○	○	○	○	○	○
13. People who engage in SM are more likely to become involved in domestic violence.	○	○	○	○	○	○	○
14. A Dominant is more likely than the average person to rape a romantic partner.	○	○	○	○	○	○	○
15. A Dominant is more likely than the average person to rape a stranger.	○	○	○	○	○	○	○
16. A Dominant is more likely to sexually molest a child than the average person.	○	○	○	○	○	○	○
17. A variety of serious psychological disorders are associated with sadomasochism.	○	○	○	○	○	○	○
18. Sadomasochists are just like everybody else.	○	○	○	○	○	○	○
19. Sadomasochism is erotic and sexy.	○	○	○	○	○	○	○
20. Many sadomasochists are very moral and ethical people.	○	○	○	○	○	○	○
21. Sadomasochistic activity should be legal, as long as all participants are consenting adults.	○	○	○	○	○	○	○
22. Submissives are passive in other aspects of their lives (besides sex).	○	○	○	○	○	○	○
23. Dominants are aggressive and domineering in other aspects of their lives (besides sex).	○	○	○	○	○	○	○

23 Self-Concept and Self-Esteem

Sexual Self-Schema Scales

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Self-schemas are cognitive representations about the self that function to filter and organize social information, thereby guiding behaviors within self-relevant domains (Markus, 1977). Andersen and Cyranowski (1994) first offered the concept of *sexual self-schemas* as aspects of one's self-view that relate specifically to one's sexuality. Sexual self-schemas represent a cognitive, individual difference variable that serves to organize sexually relevant experiences and attitudes, and that provide 'scripts' to guide future judgements, decisions, and behaviors with potential relevance to one's sexuality.

There are female (Andersen & Cyranowski, 1994) and male (Andersen, Cyranowski, & Espindle, 1999) versions of the Sexual Self-Schema (SSS) scales. Titled "*Describe Yourself,"* the scales are brief, with 45–50 adjectives that are rated as to how strongly each "describes you." Regarding the items, 26–27 are scored and 23–24 are unscored (filler). This approach provides a measure which is unobtrusive, with respondents unaware that a sexual construct is being assessed. As detailed below, the SSS scales are potent predictors of sexual cognitions and behaviors, sexual relationship satisfaction, and sexual and psychosocial adjustment.

Development

Separate psychometric studies were conducted to identify adjectives associated with semantic representations of a "sexual woman" and a "sexual man." Item selection optimized internal consistency and convergent validity, while minimizing response bias. Initial item pools were rated by same-sex undergraduates and older individuals as to their descriptiveness of a "sexual woman/man." A series of convergent/discriminant validity studies then had individuals rate each adjective on a 7-point scale ranging from 0 (*not at all descriptive of me*) to 6 (*very much descriptive of me*), along with self-report measures of: (1) measurement error (social desirability, self-esteem, affective state) and (2) sexual experiences and emotions (previous sexual experiences; sexual/romantic attitudes; sexual responsiveness, anxiety, aversion or guilt). Items displaying associations with sexual behaviors, attitudes and/or responses that were unimpeded by affective or socially desirable response biases were selected for inclusion.

Response Mode and Timing

Participants rate adjectives on a 7-point Likert scale, ranging from 0 (*not at all descriptive of me*) to 6 (*very much descriptive of me*). The scales take approximately 5 minutes to complete.

Scoring

Female version

The 26 scored items are summed to obtain three subscale scores, after reverse-keying Item 45. Subscales include: *Passionate/Romantic* (sum of Items 5, 11, 20, 35, 37, 39, 44, 45R, 48, and 50); *Open/Direct* (sum of Items 2, 6, 9, 13, 16, 18, 24, 25, and 32); and *Embarrassed/Conservative* (sum of Items 3, 8, 22, 28, 31, 38, and 41). Total female SSS scores are calculated as *Passionate/Romantic + Open/Direct – Embarrassed/Conservative*, and range from –42 to 114.

Male version

The 27 scored items are summed to obtain three subscale scores, after reverse-keying Items 2, 10, and 33. Subscales include: *Passionate/Loving* (sum of Items 4, 13, 18, 19, 22, 27, 31, 36, 38, and 42); *Powerful/Aggressive* (sum of Items 6, 7, 9, 10R, 11, 24, 26, 29, 30, 33R, 34, 41, and 43);

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and *Open-Minded/Liberal* (sum of Items 2R, 16, 21, and 39). Total male SSS score are calculated as *Passionate/Loving* + *Powerful/Aggressive* + *Open-Minded/Liberal*, and range from 0 to 162.

Reliability

Female version

Test–retest reliabilities for 2- and 9-week intervals have been shown to be high (.89 and .88, respectively; Andersen & Cyranowski, 1994). Cronbach's alpha values obtained in college women ($N = 387$) were as follows: Total scale, .82; *Passionate/Romantic* subscale, .81; *Open/Direct* subscale, .77, *Embarrassed/Conservative* subscale, .66 (Andersen & Cyranowski, 1994). Similar internal consistency estimates have been reported for samples including women who are older, vary in sexual orientation, have physical disabilities or sexual dysfunction, and are survivors of cancer or childhood abuse. Additional reliability data are needed to support use of the SSS scales within non-majority racial, sexual orientation, and transgender samples.

Male version

Nine-week test–retest reliabilities have been shown to be high (.81; Andersen et al., 1999). Cronbach's alpha values obtained in college males ($N = 667$) were as follows: Total scale, .86; *Passionate/Loving* subscale, .89; *Powerful/Aggressive* subscale, .78; *Open-Minded/Liberal* subscale, .65 (Andersen et al., 1999). Relatively similar internal consistency estimates have been observed across samples of males who are older, in current heterosexual relationships, and prostate cancer survivors. Additional reliability data are needed to support use of the scale within non-majority racial, sexual orientation, and transgender samples.

Validity

Female version

Criterion validity data (Andersen & Cyranowski, 1994; Cyranowski & Andersen, 1998, 2000) have shown the female SSS scale to predict sexual cognitions (reaction times rating sexually related terms), attitudes (erotophobia/erotophilia), behaviors (number of sexual partners, frequency of sexual activity, patterns of sexual avoidance), responses (sexual desire, arousal, anxiety), and sexual relationship satisfaction.

Consistent experimental, criterion, and contrasted groups validity data have been reported. Heiman, Kuffel and colleagues (Kuffel & Heiman, 2006; Middleton, Kuffel & Heiman, 2008) have shown that when women are asked to adopt specific sexual self-schemas, they exhibit predictable differences in vaginal responses and subjective reports of sexual arousal to sexually explicit videos. Research shows that survivors of child sexual abuse (CSA) endorse lower Romantic/Passionate scores (Meston, Rellini, & Heiman, 2006), and that total SSS scores predict sexual function and satisfaction among women with and without CSA (Rellini, Ing, & Meston, 2011). Seehuus, Clifton and Rellini (2015) showed that *Passionate/Romantic* scores related to sexual function and satisfaction, that *Embarrassed/Conservative* scores related to sexual satisfaction, and that *Direct/Open* scores mediated relationships between childhood abuse and adult sexual satisfaction.

Further clinical relevance of female SSS scores has been reported by Reissing, Binik, Khalifé, Cohen, and Amsel (2003), who found that women with sexual pain disorders reported less positive SSS scores than women with no pain. Among cancer patients, studies have found that high SSS scores predict sexual responsiveness, behaviors and satisfaction for gynecologic (Andersen, Woods, & Copeland, 1997; Carpenter, Andersen, Fowler, & Maxwell, 2009), cervical (Donovan et al., 2007), and breast (Yurek, Farrar, & Andersen, 2000) cancer survivors.

Male version

Criterion validity data across a series of studies with college-age males (Andersen et al., 1999) demonstrated that men with higher SSS scores experience a wider range of sexual activities and more sexual partners, are more likely to be involved in a romantic relationship, and anticipate having higher levels of sexual activity in the future, when compared with males with lower SSS scores. Using a cognitive reaction time task, males with higher SSS also display faster reaction times to select—and endorse higher levels of—positively valenced sexual terms as self-descriptive.

Consistent criterion and contrasted groups validity data have been obtained from other investigators studying the impact of SSS on men's sexual activities and satisfaction. In one study of 153 college men, Lindgren, Schacht, Mullins, and Blayney (2011) found that men's SSS varied as a function of sexual debut (whether or not individuals had become sexually active), such that post-debut males scored higher on *Powerful/Aggressive* and *Open-Minded/Liberal* scales, as compared with pre-debut males. In a study of 117 heterosexual couples (mean age 36–38 years), Mueller, Rehman, Fallis, and Goodnight (2016) found that for men, higher total SSS scores predicted higher sexual satisfaction; whereas higher *Embarrassed/Conservative* scores predicted lower sexual satisfaction for wives. While there were no correlations between partners' SSS scores, men and women with higher SSS scores rated their partners as more sexually satisfied, a finding the authors discuss as "schematic projection."

Among male cancer patients, Schover et al. (2002) found that men with high SSS scores were more likely to try to address erectile problems and engage in sexual

activity post-treatment. However, Hoyt and Carpenter (2015) found that among prostate cancer survivors, men with higher SSS scores were more likely to experience depressive symptoms when faced with post-treatment reductions in sexual function.

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Exhibit

Sexual Self-Schema (SSS) Scales

Gender:

○ Male
○ Female

Female Version

Describe Yourself

Directions: Below is a listing of 50 adjectives. For each word, consider whether or not the term describes you. Each adjective is to be rated on a scale ranging from 0 = *not at all descriptive of me* to 6 = *very much descriptive of me*. Choose a number

for each adjective to indicate how accurately the adjective describes you. There are no right or wrong answers. Please be thoughtful and honest.

Question: To what extent does the term _____ describe me?

	0 Not at all descriptive of me	1	2	3	4	5	6 Very much descriptive of me
1. generous	○	○	○	○	○	○	○
2. uninhibited	○	○	○	○	○	○	○
3. cautious	○	○	○	○	○	○	○
4. helpful	○	○	○	○	○	○	○
5. loving	○	○	○	○	○	○	○
6. open-minded	○	○	○	○	○	○	○
7. shallow	○	○	○	○	○	○	○
8. timid	○	○	○	○	○	○	○
9. frank	○	○	○	○	○	○	○
10. clean-cut	○	○	○	○	○	○	○
11. stimulating	○	○	○	○	○	○	○
12. unpleasant	○	○	○	○	○	○	○
13. experienced	○	○	○	○	○	○	○
14. short-tempered	○	○	○	○	○	○	○
15. irresponsible	○	○	○	○	○	○	○
16. direct	○	○	○	○	○	○	○
17. logical	○	○	○	○	○	○	○
18. broad-minded	○	○	○	○	○	○	○
19. kind	○	○	○	○	○	○	○
20. arousable	○	○	○	○	○	○	○
21. practical	○	○	○	○	○	○	○
22. self-conscious	○	○	○	○	○	○	○
23. dull	○	○	○	○	○	○	○
24. straightforward	○	○	○	○	○	○	○
25. casual	○	○	○	○	○	○	○
26. disagreeable	○	○	○	○	○	○	○
27. serious	○	○	○	○	○	○	○
28. prudent	○	○	○	○	○	○	○
29. humorous	○	○	○	○	○	○	○
30. sensible	○	○	○	○	○	○	○
31. embarrassed	○	○	○	○	○	○	○
32. outspoken	○	○	○	○	○	○	○
33. level-headed	○	○	○	○	○	○	○
34. responsible	○	○	○	○	○	○	○
35. romantic	○	○	○	○	○	○	○
36. polite	○	○	○	○	○	○	○
37. sympathetic	○	○	○	○	○	○	○
38. conservative	○	○	○	○	○	○	○
39. passionate	○	○	○	○	○	○	○
40. wise	○	○	○	○	○	○	○
41. inexperienced	○	○	○	○	○	○	○
42. stingy	○	○	○	○	○	○	○
43. superficial	○	○	○	○	○	○	○
44. warm	○	○	○	○	○	○	○
45. unromantic	○	○	○	○	○	○	○

46. good-natured	○	○	○	○	○	○	○
47. rude	○	○	○	○	○	○	○
48. revealing	○	○	○	○	○	○	○
49. bossy	○	○	○	○	○	○	○
50. feeling	○	○	○	○	○	○	○

Male Version

Describe Yourself

Below is a listing of 45 adjectives. For each word, consider whether or not the term describes you. Each adjective is to be rated on a 7-point scale ranging from 0 = *not at all descriptive of me* to 6 = *very much descriptive of me*. Choose a number for each adjective to indicate how accurately the adjective describes you. There are no right or wrong answers. Please be thoughtful and honest.

Question: To what extent does the term _____ describe me?

	0 Not at all descriptive of me	1	2	3	4	5	6 Very much descriptive of me
1. humorous	○	○	○	○	○	○	○
2. conservative	○	○	○	○	○	○	○
3. smart	○	○	○	○	○	○	○
4. soft-hearted	○	○	○	○	○	○	○
5. unpleasant	○	○	○	○	○	○	○
6. powerful	○	○	○	○	○	○	○
7. spontaneous	○	○	○	○	○	○	○
8. shallow	○	○	○	○	○	○	○
9. independent	○	○	○	○	○	○	○
10. inexperienced	○	○	○	○	○	○	○
11. domineering	○	○	○	○	○	○	○
12. healthy	○	○	○	○	○	○	○
13. loving	○	○	○	○	○	○	○
14. helpful	○	○	○	○	○	○	○
15. passive	○	○	○	○	○	○	○
16. open-minded	○	○	○	○	○	○	○
17. sloppy	○	○	○	○	○	○	○
18. feeling	○	○	○	○	○	○	○
19. arousable	○	○	○	○	○	○	○
20. rude	○	○	○	○	○	○	○
21. broad-minded	○	○	○	○	○	○	○
22. passionate	○	○	○	○	○	○	○
23. wise	○	○	○	○	○	○	○
24. aggressive	○	○	○	○	○	○	○
25. polite	○	○	○	○	○	○	○
26. revealing	○	○	○	○	○	○	○
27. warm-hearted	○	○	○	○	○	○	○
28. stingy	○	○	○	○	○	○	○
29. exciting	○	○	○	○	○	○	○
30. direct	○	○	○	○	○	○	○
31. sensitive	○	○	○	○	○	○	○
32. responsible	○	○	○	○	○	○	○
33. reserved	○	○	○	○	○	○	○
34. experienced	○	○	○	○	○	○	○

35. good-natured	○	○	○	○	○	○	○
36. romantic	○	○	○	○	○	○	○
37. shy	○	○	○	○	○	○	○
38. compassionate	○	○	○	○	○	○	○
39. liberal	○	○	○	○	○	○	○
40. kind	○	○	○	○	○	○	○
41. individualistic	○	○	○	○	○	○	○
42. sensual	○	○	○	○	○	○	○
43. outspoken	○	○	○	○	○	○	○
44. lazy	○	○	○	○	○	○	○
45. excitable	○	○	○	○	○	○	○

Sexual Contingent Self-Worth Scale

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The Sexual Contingent Self-Worth (CSW) Scale was developed to assess an individual's tendency to base their self-esteem on maintaining a successful sexual relationship (Glowacka, Rosen, Vannier, & MacLellan, 2017). Sexual CSW is composed of two distinct but related factors: positive sexual events (the degree to which positive sexual events boost self-esteem) and negative sexual events (the degree to which negative sexual events decrease self-esteem). The Sexual CSW Scale consists of eight items—four from each factor—that are rated on a 5-point Likert-type scale. Higher scores reflect greater sexual CSW.

Development

The Sexual CSW Scale was developed by adapting all of the items from the Relationship Contingent Self-Esteem Scale (Knee, Canevello, Bush, & Cook, 2008) to a sexual context, mainly by adding the word "sexual" before the word "relationship." The original scale contained 11 items rated from 1 (*not at all like me*) to 5 (*very much like me*). A principal axis factor analysis with an oblique rotation was conducted with an online community sample of 329 sexually active American men and women (mean age = 30.19, *SD* = 7.05; Glowacka et al., 2017). Participants were mostly Caucasian, in a mixed-gender relationship, and married or cohabiting. The results showed that the Sexual CSW Scale was composed of two distinct factors with five items each: *positive sexual events* subscale (eigenvalue of 5.84, accounting for 53.07% of the variance) and *negative sexual events* subscale (eigenvalue of 1.53, accounting for 13.88% of the variance). One item was removed from the scale because it had factor loadings lower than .5 on both factors. The two subscales were moderately correlated with each other (r = .59, p < .001), providing evidence for the use of a total score (Glowacka et al., 2017).

We conducted a confirmatory factor analysis in a second online community sample of 282 sexually active men and women (mean age = 30.72, *SD* = 6.74), with similar sociodemographics to our previous sample. The results confirmed the factor structure of the scale (i.e., the two subscales and total score). Two items were removed from the Sexual CSW Scale (one from each subscale) based on an examination of the residuals and parameter weights. The final measure, therefore, consisted of eight items with four items in each subscale (Glowacka et al., 2017).

Response Mode and Timing

Respondents rate all of the items on a scale ranging from 1 (*not at all like me*) to 3 (*somewhat like me*) to 5 (*very*

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much like me). The scale can be completed in approximately five minutes.

Scoring

Scores can range from 8 to 40. Items 4, 5, and 7 are reverse-scored. Items 1, 2, 3, and 8 are summed to calculate the *positive sexual events* subscale. Items 4, 5, 6 and 7 are summed for the *negative sexual events* subscale. The total score is calculated by summing all of the items.

Reliability

The scale showed good to excellent internal consistency across both samples for the total score (αs =.89–.90), the *positive sexual events* subscale (αs = .89–.94), and the *negative sexual events* subscale (αs =.84–.86; Glowacka et al., 2017). In the second sample, the Sexual CSW Scale had good test–retest reliability over an interval of two weeks for the total score (ICC = .78, 95% CI = .72 to .84), *positive sexual events* subscale (ICC = .73, 95% CI = .65 to .79), and *negative sexual events* subscale (ICC = .71, 95% CI = .63 to .78). The Sexual CSW Scale has also demonstrated reliability in individuals suffering from sexual problems. In a sample of 82 women diagnosed with a genito-pelvic pain condition and their romantic partners, Cronbach's alpha for the total score was .80 for affected women and .81 for their partners (Glowacka, Bergeron, Dubé, & Rosen, 2018).

Validity

We established convergent validity by examining associations with conceptually related constructs resulting in correlation coefficients greater than .30 and less than .60 (i.e., a moderate association). Greater sexual CSW was positively correlated with levels of CSW in other domains (family support, competition, appearance, approval from others, and academic competence; *r*s = .35–.48), the self-focus aspect of sexual self-consciousness (r = .32), and dependent (preoccupation with the sexual relationship; r = .58) and selfless (neglecting own needs to please sexual partner; r = .38) sexual approach styles. To determine discriminant validity, we examined correlations lower than .3 and eta-squared lower than .05 (i.e., small effect size) between sexual CSW and unrelated constructs. The correlations between sexual CSW and other sexual approach styles were well below .3. There were no significant associations between sexual CSW and demographic variables including age, gender, education, culture, relationship length or status. We found support for the incremental validity of the Sexual CSW Scale, such that sexual CSW was associated with related outcomes (sexual self-consciousness self-focus and a dependent sexual approach style) over and above the contribution of relationship CSW. These findings suggest that sexual CSW is a novel construct that is distinguishable from relationship CSW (Glowacka et al., 2017).

We examined the known-groups validity of the Sexual CSW Scale; that is, whether groups expected to differ in level of sexual CSW were in fact significantly different. We expected that sexual CSW would be greater in those with sexual problems than those without problems because individuals with high CSW are more likely to perceive failures in the contingent domain (i.e., the sexual relationship). For example, greater body weight CSW has been associated with higher subjective ratings of being overweight (Clabaugh, Karpinski, & Griffin, 2008). In support of the Sexual CSW Scale's construct validity, participants in our second online community sample with sexual problems (M = 29.79, SD = 6.47, n = 179) reported greater sexual CSW than those without sexual problems (M = 28.11, SD = 7.89, n = 103, t =−1.94, df = 280, p < .05, 95% CI = −3.39 to .02; Glowacka et al., 2017).

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Exhibit

Sexual Contingent Self-Worth (CSW) Scale

Please rate the following Items 1 (not at all like me) to 3 (somewhat like me) to 5 (very much like me).

	1 Not at all like me	2	3 Somewhat like me	4	5 Very much like me
1. I feel better about myself when it seems like my partner and I are getting along sexually.	○	○	○	○	○
2. I feel better about myself when it seems like my partner and I are sexually connected.	○	○	○	○	○
3. When my sexual relationship is going well, I feel better about myself overall.	○	○	○	○	○
4. If my sexual relationship were to end tomorrow, I would not let it affect how I feel about myself.	○	○	○	○	○
5. My self-worth is unaffected when things go wrong in my sexual relationship.	○	○	○	○	○
6. When my partner and I fight about a sexual issue, I feel bad about myself in general.	○	○	○	○	○
7. When my sexual relationship is going bad, my feelings of self-worth remain unaffected.	○	○	○	○	○
8. I feel better about myself when I feel that my partner and I have a good sexual relationship.	○	○	○	○	○

Sexual Self-Concept Inventory

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The Sexual Self-Concept Inventory (SSCI) was designed to assess the gender-specific sexual self-concepts of early adolescent girls based on extensive formative work with ethnically diverse samples. Details regarding this measure can be found in O'Sullivan, Meyer-Bahlburg, and McKeague (2006).

The SSCI is a 34-item instrument comprising three scales that are shown to be distinct and reliable dimensions of early adolescent girls' sexual self-concepts. These scales assess *Sexual Arousability, Sexual Agency*, and *Negative Sexual Affect. Sexual Arousability* reflects sexual responsiveness, whereas *Sexual Agency* incorporates items relating to sexual curiosity. *Negative Sexual Affect* addresses sexual anxiety as well as some concerns relating to sexual monitoring.

Development

The measure was developed following extensive formative work using both qualitative and quantitative methods with samples of ethnically diverse, urban, early adolescent girls (12–14 years of age). The formative data were used to generate an item pool using the exact wording from transcripts of girls' interviews and focus groups to help ensure item comprehension and authenticity amongst the target population. Principal components analytic procedures were used to ascertain the instrument's factor structures, from which the three scales emerged. The SSCI has been used in populations of adolescents around the world, including the United States (Williams, 2012), Ghana (Biney, 2016), The Netherlands (Hald, Kuyper, Adam, & Wit, 2013), and Taiwan (Lou, Chen, Yu, Lin, & Li, 2010; Pai & Lee, 2012).

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Response Mode and Timing

Respondents indicate their degree of agreement with 34 items on a Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The questionnaire takes approximately four minutes to complete.

Scoring

Scores for each of the three SSCI scales are computed by summing the respective items: *Sexual Arousability* (17 items, Items 1 to 17), *Sexual Agency* (10 items, Items 18 to 27), and *Negative Sexual Affect* (seven items, Items 28 to 34). There are no filler or reverse-scored items.

Reliability

Coefficient alphas for the three scales were .91 (*Sexual Arousability*), .76 (*Sexual Agency*), and .67 (*Negative Sexual Affect*). These coefficients are considered to be good to very good (DeVellis, 1991). Fifty participants were retested three weeks after the first administration of the instrument. The test–retest reliability coefficients for the three scales were substantial: $r = .68$, $p < .001$ (*Sexual Arousability*); $r = .69$, $p < .001$ (*Sexual Agency*); and $r = .67$, $p < .001$ (*Negative Sexual Affect*). In addition, 162 girls were administered the SSCI on two occasions, one year apart, to examine how girls' scores changed over the one-year period. Test–retest coefficients were $r = .59$, $p < .001$ (*Sexual Arousability*); $r = .84$, $p < .001$ (*Sexual Agency*); and $r = .69$, $p < .001$ (*Negative Sexual Affect*), indicating stability in scores.

Among a sample of Dutch adolescents and young adults, the Cronbach's alpha was .84 (Hald et al., 2013). An adapted version of the SSCI produced a Cronbach's alpha of .90 among a sample of nursing students (Hsu, Yu, Lou, & Eng, 2015). Among Taiwanese adolescents, Cronbach's alpha ranged from .83 to .92 (Lou et al., 2010; Lou, Chen, Li, & Yu, 2011), .62 to .82 (Pai, Lee, & Chang, 2010) and .68 to .92 (Pai, Lee & Yen, 2012) for the subscales, and were .93 overall (Lou et al., 2010, 2011). Test–retest reliability coefficients for the subscales were .74 (*Sexual Arousability*), .85 (*Sexual Agency*), and .51 (*Negative Sexual Affect*; Pai, Lee, & Chang, 2010) and .74 (*Sexual Arousability*), .85 (*Sexual Agency*), and .51 (*Negative Sexual Affect*; Pai, Lee & Yen, 2012). Four items from the *Sexual Arousability* subscale were used among a sample of Latina adolescents, and produced a Cronbach's alpha of .84 (Williams, 2012).

Validity

The construct validity of the SSCI was assessed using correlations between the scale scores and sexual self-esteem (Rosenthal, Moore, & Flynn, 1991) and abstinence attitudes (Miller, Norton, Fan, & Christopherson, 1998) using a sample of 180 girls. As expected, *Sexual Arousability* and *Sexual Agency* correlated positively with sexual self-esteem (rs = .37 and .43, ps < .001), whereas *Negative Sexual Affect* correlated negatively with this scale ($r = -.18$, $p < .05$). *Negative Sexual Affect* was positively correlated with abstinence attitudes ($r = .43$, $p < .001$), whereas *Sexual Arousability* and *Sexual Agency* were negatively correlated with these attitudes (rs = –.44 and –.22, $p < .001$). As a test of discriminant validity, we assessed correlations of SSCI scale scores with parenting attitudes (Unger, Molina, & Teran, 2000), as girls frequently dissociate sexual experiences from reproduction (O'Sullivan & Meyer-Bahlburg, 2003). That is, scores on measures regarding the value that they place on parenting were expected to be unrelated to girls' views of themselves as sexual people. As predicted, none of the three scales was significantly correlated with parenting attitudes (ps > .05). *Sexual Arousability*, but not *Sexual Agency*, was positively correlated with scores on a measure of perceived maternal approval of sexual activity ($r = .23$, $p < .01$; Treboux & Busch-Rossnagel, 1990), and *Negative Sexual Affect* was negatively correlated with these ratings ($r = -.20$, $p < .01$). Girls with high *Sexual Arousability* and *Sexual Agency* had scores reflecting less disapproval/more approval (rs = .32 and .31, ps < .01) on a measure of perceived peer approval for sexual intercourse experience (Treboux & Busch-Rossnagel, 1990); *Negative Sexual Affect* was unrelated. Girls with higher *Sexual Arousability* and *Sexual Agency* perceived a greater proportion of their friends to have sexual intercourse experience ($r = .24$, $p < .01$ and $r = .33$, $p < .001$); *Negative Sexual Affect* was unrelated. Girls' *Sexual Arousability* and *Sexual Agency* were positively correlated with future orientation (rs = .45 and .21, $p < .01$), whereas *Negative Sexual Affect* was negatively correlated with this variable ($r = -.26$, $p < .001$).

We also examined correlations between SSCI scores and sexual experience. Given that relatively few girls in this age range report sexual intercourse experience (Paikoff, 1995), we examined associations with intentions to engage in intercourse in the near future, as well as lifetime reports of having had a crush, having had a boyfriend, having been in love, having engaged in kissing, having engaged in breast fondling with a partner, having engaged in genital touching with a partner, having engaged in oral sex, and having engaged in vaginal intercourse. Girls with higher levels of sexual experience tended to have more positive sexual self-concepts (i.e., *Sexual Arousability* and *Sexual Agency* and lower *Negative Sexual Affect*). Participation in romantic activities and the range of lower-level sexual activities was positively correlated with *Sexual Arousability* scores (O'Sullivan et al., 2006). This was also true of *Sexual Agency*, although the associations were notably less strong, and only significant for participation in kissing and breast fondling. This pattern suggests that *Sexual Arousability* and *Sexual Agency* tap overlapping, but somewhat different, constructs. Girls who reported sexual intercourse experience (at least once in the past) tended to report higher *Sexual Arousability* scores. Girls' reports of breast

fondling, touching a penis, oral sex, and/or intercourse tended to be negatively and moderately correlated with scores for *Negative Sexual Affect*. (Note: Higher levels of sexual experiences were relatively uncommon among girls at these ages.) The SSCI produced a content validity index of .93 among a sample of Taiwanese adolescents (Lou et al., 2010, 2011).

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Exhibit

Sexual Self-Concept Inventory

The questions below are about your views about yourself and other people your age. Please read each statement carefully and then rate each statement according to how much you agree with it using a number from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*).

An answer is correct to the extent it truly reflects how much you agree with it.

	1 Strongly Disagree	2	3	4	5	6 Strongly Agree
1. I sometimes think I'd like to try doing the sexual things my friends are doing with their boyfriends.	○	○	○	○	○	○
2. When I kiss a guy, I get hot.	○	○	○	○	○	○
3. I would really want to touch a boyfriend if we were left alone together.	○	○	○	○	○	○
4. I sometimes want to know how different types of sex feel.	○	○	○	○	○	○
5. If I'm going to see a guy I like, I like to dress sexy.	○	○	○	○	○	○
6. If a guy kisses me, I also want him to touch my body.	○	○	○	○	○	○
7. When I flirt with a guy, I like to feel him up.	○	○	○	○	○	○
8. Sometimes I dress sexy to get attention from guys.	○	○	○	○	○	○
9. If I were to kiss a guy, I'd get really turned on.	○	○	○	○	○	○
10. There are things about sex I want to try.	○	○	○	○	○	○
11. If a boy kisses me, my body feels good.	○	○	○	○	○	○

12.	I enjoy talking about sex or talking sexy with boys I know really well.	○	○	○	○	○	○
13.	If I were kissing and touching a guy, I would get hyped, real excited.	○	○	○	○	○	○
14.	I enjoy talking about sex with my girl friends.	○	○	○	○	○	○
15.	It's okay to feel up on a guy.	○	○	○	○	○	○
16.	I like it when a guy tells me I look good.	○	○	○	○	○	○
17.	I think I'm ready to have sex.	○	○	○	○	○	○
18.	Girls always wonder what sex is going to be like the first time.	○	○	○	○	○	○
19.	I sometimes think about who I would want to have sex with.	○	○	○	○	○	○
20.	When I decide to have sex with a guy, it will be because I wanted to have sex and not because he really wanted me to have sex with him.	○	○	○	○	○	○
21.	Girls sometimes have sex because they're curious and want to see what it's like.	○	○	○	○	○	○
22.	Sex is best with a guy you love.	○	○	○	○	○	○
23.	I like to let a guy know when I like him.	○	○	○	○	○	○
24.	If I have sex, my friends will want to know all about it.	○	○	○	○	○	○
25.	If I had sex with a guy, I would be running the risk of being played (taken advantage of).	○	○	○	○	○	○
26.	Flirting is fun and I am good at it.	○	○	○	○	○	○
27.	If I have sex with a guy, I would worry that I could get my feelings really hurt.	○	○	○	○	○	○
28.	If I kiss a guy I don't really know, I'm afraid of what people will think about me.	○	○	○	○	○	○
29.	Sex is nasty.	○	○	○	○	○	○
30.	Sex isn't fun for girls my age.	○	○	○	○	○	○
31.	I would be scared to be really alone with a boyfriend.	○	○	○	○	○	○
32.	Some girls have sex just to be accepted or popular.	○	○	○	○	○	○
33.	I think I am too young to have sex.	○	○	○	○	○	○
34.	If I have sex, my friends will want to know all about it.	○	○	○	○	○	○

Sexual Shame and Pride Scale

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The Sexual Shame and Pride Scale (SSPS; Rendina, López-Matos, Wang, Pachankis, & Parsons, 2018) was designed to capture two self-conscious emotions—shame and pride—as they relate specifically to sexual thoughts, feelings, and behaviors. Sexual shame is a negative self-conscious emotion that is associated with global feelings of failure resulting from sexual thoughts, feelings, and behaviors. Sexual pride—which is the only positive *self-conscious* emotion—is a global sense of self-worth and self-regard resulting from one's sexual thoughts, feelings, and behaviors (Tracy, Robins, & Tangney, 2007). Sexual shame has been theorized to undermine sexual health and general well-being (Pachankis et al., 2015; Rendina, Golub, Grov, & Parsons, 2012), whereas sexual pride has been hypothesized to be a resilience factor, protecting and buffering negative effects against these same

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outcomes, particularly among gay, bisexual, and other men who have sex with men (Herrick et al., 2011; Herrick, Stall, Goldhammer, Egan, & Mayer, 2014). Though validated measures of sexual anxiety, sexual esteem, sexual self-schema, and sexual assertiveness exist—including those published within this book—these two self-conscious emotions have not yet been specifically measured. The goal of developing this scale was to simultaneously capture both of these sexual self-conscious emotions directly, whereas they have only been captured indirectly (e.g., through other variables like internalized homonegativity) in prior research. The scale consists of a total of 16 items, with eight corresponding to sexual shame and eight corresponding to sexual pride.

Development

An initial set of items for the SSPS was developed by the first author after consulting existing scales of similar relevant constructs such as sexual self-schema and sexual esteem (e.g., Snell, 1998) as well as consulting the literature on the measurement of self-conscious emotions that are not specific to sexual thoughts, feelings, and behaviors (e.g., Tangney, 1996; Tracy, Robins, & Tangney, 2007). Following this, experts in social and clinical psychology were consulted for feedback and the initial list of items was modified and reduced. For example, items thought to tap more into guilt than shame were modified or removed. The SSPS was tested in a series of previously described psychometric analyses (Rendina et al., 2018). In this manuscript, the scale was tested on a sample of 260 highly sexually active gay and bisexual men in New York City. Highly sexually active was operationally defined as having more than 9 sex partners in the prior 90 days (participants in the sample reported a median of 21 partners in the prior 90 days). The broader study was focused on issues of sexual compulsivity and hypersexuality, and thus the primary purpose was to examine the role of sexual shame and pride in relation to these constructs and sexual behavior.

Response Mode and Timing

Below we recommend modifications to the scale as it was initially used, and these modifications are reflected in the published version within this chapter. In the initial use of the scale, respondents were given the following instructions: "*Please rate the extent to which each of the following items describes you on a scale from 0 (not true at all) to 6 (completely true).*" As such, there was no specific time frame requested. The response options contained anchors only at the 0 (*not true a tall*), 3 (*somewhat true*), and 6 (*completely true*) points.

In subsequent unpublished item response theory analyses, the item information curves suggest no added benefit of 2 of the 7 intermediate, unlabeled response options—as such, we recommend that in all future research, the scale be administered with responses ranging from 0 through 4, with labeled anchors at 0 (*not true at all*), 2 (*somewhat true*), and 4 (*completely true*) and corresponding changes to the instructions: "*Please rate the extent to which each of the following items describes you on a scale from 0 (not true at all) to 4 (completely true).*" The measure can be self-administered and completed in one to two minutes. The 16 items were randomly displayed to each participant in a different order to reduce ordering and priming effects, and such a technique is recommended whenever possible—when such a technique is not possible, researchers should consider counter-balancing whether the shame or pride items are delivered first.

Scoring

Previously published factor analyses revealed two subscales corresponding to the hypothesized constructs of sexual shame and sexual pride, with eight items per subscale (Rendina et al., 2018). Responses for each of the eight shame items (Items 1–8) and each of the eight pride items (Items 9–16) should be averaged separately to form two subscales, one per construct. There was no evidence for an overall score and no such global score should be computed.

Reliability

Published analyses included an examination of both internal consistency at a single time point and test–retest reliability over a three-month period (Rendina et al., 2018). Cronbach's alpha, a measure of internal consistency, was calculated to be .88 for the sexual shame subscale and .74 for the sexual pride subscale at the initial survey—three months later, these remained high ($\alpha = .90$ and $\alpha = .83$, respectively). The intraclass correlation—a measure of stability over time and thus an indicator of test–retest reliability—was .75 for the sexual shame subscale and .64 for the sexual pride subscale. In other words, 75 percent of the variability in sexual shame and 64 percent of the variability in sexual pride were due to stable, between-person differences, which is a good degree of internal consistency over such a time span. Similarly, the two sexual shame measurements were strongly correlated ($r = .60$) and the two sexual pride measurements were moderately to strongly correlated ($r = .48$).

Validity

The previously published analyses of this scale examined both construct validity by measuring bivariate correlations with relevant constructs, as well as predictive validity by measuring predictive models focused on sexual compulsivity and sexual behaviors (Rendina et al., 2018). These analyses were also theoretical in nature, and

thus the specifics of the findings are beyond the scope of this chapter, though the general findings indicating the validity are summarized herein.

Sexual shame was significantly positively correlated with both general mental health (i.e., anxiety and depression, emotion dysregulation) and sexuality-specific mental health (i.e., sexual compulsivity, maladaptive cognitions about sex) outcomes. Sexual pride was less strongly associated with these and in the opposite direction—the only significant correlations were for depression and anxiety, emotion dysregulation, and one of the three maladaptive cognitions subscales. Additionally, sexual shame was positively correlated with internalized homonegativity, which has often been used as a proxy measure of sexual shame, and sexual pride was negatively correlated with internalized homonegativity, though the effect size was substantially lower ($r = .45$ compared to $r = -.15$). Together, these findings indicate good convergent validity for both subscales, though particularly for sexual shame—future analyses should consider more positive and resilience-relevant outcomes as additional indicators of convergent validity for sexual pride.

In models predicting sexual compulsivity, the sexual shame subscale was found to predict additional variability over-and-above a range of other constructs that have been empirically validated as contributing to sexual compulsivity symptomology (Pachankis et al., 2015; Pachankis, Rendina, Ventuneac, Grov, & Parsons, 2014). Subsequent models were focused on predicting sexual behaviors, with four outcomes used—number of sexual partners, number of first-time sexual partners, number of anal sex acts, and number of condomless anal sex acts. Across all four analyses, we found evidence for a significant main effect of pride, but this was in the context of a significant interaction between sexual shame and pride. Specifically, for all four outcomes of interest, high levels of sexual pride were associated with increased frequency of sexual partners and sexual acts, but this association was attenuated among those who also had high levels of sexual shame.

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Exhibit

The Sexual Shame and Pride Scale

Please rate the extent to which each of the following items describes you on a scale from 0 (not true at all) to 4 (completely true).

	0 Not at all true	1	2 Somewhat true	3	4 Completely true
Sexual Shame Subscale					
1. I often feel embarrassed by the sexual activities that I like.	○	○	○	○	○
2. I would be ashamed if people knew the kinds of things I have done sexually.	○	○	○	○	○
3. I am often embarrassed to tell my sexual partners about my sex life.	○	○	○	○	○
4. I tend to feel bad or dirty after sex.	○	○	○	○	○

5. Shortly after sex, I am often ashamed of what I have just done.	○	○	○	○	○
6. I am often embarrassed about the people who I have sex with.	○	○	○	○	○
7. I often try to hide the people I have sex with or keep them a secret.	○	○	○	○	○
8. I am ashamed by my sexual capabilities.	○	○	○	○	○
Sexual Pride Subscale					
9. I think that I'm a great sexual partner to have.	○	○	○	○	○
10. I tend to describe my sexual fantasies and/or fetishes to sexual partners.	○	○	○	○	○
11. I am comfortable being naked in front of my sexual partners.	○	○	○	○	○
12. I know that I am skilled at performing the kinds of sexual acts that I like to perform.	○	○	○	○	○
13. There are people with whom I regularly discuss my sex life.	○	○	○	○	○
14. I don't have difficulty telling my sexual partners about what I do or don't like sexually.	○	○	○	○	○
15. I am comfortable telling my partners what I want or need sexually.	○	○	○	○	○
16. When I want to have sex with someone, I have no problem approaching them.	○	○	○	○	○

Multidimensional Sexual Self-Concept Questionnaire

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The Multidimensional Sexual Self-Concept Questionnaire (MSSCQ; Snell, 1995) is an objective self-report instrument designed to measure the following 20 psychological tendencies of human sexuality:

(1) *sexual anxiety*, defined as the tendency to feel tension, discomfort, and anxiety about the sexual aspects of one's life;
(2) *sexual self-efficacy*, defined as the belief that one has the ability to deal effectively with the sexual aspects of oneself;
(3) *sexual consciousness*, defined as the tendency to think and reflect about the nature of one's own sexuality;
(4) *motivation to avoid risky sex*, defined as the motivation and desire to avoid unhealthy patterns of risky sexual behaviors (e.g., unprotected sexual behavior);
(5) *chance/luck sexual control*, defined as the belief that the sexual aspects of one's life are determined by chance and luck considerations;
(6) *sexual preoccupation*, defined as the tendency to think about sex to an excessive degree;
(7) *sexual assertiveness*, defined as the tendency to be assertive about the sexual aspects of one's life;
(8) *sexual optimism*, defined as the expectation that the sexual aspects of one's life will be positive and rewarding in the future;
(9) *sexual problem self-blame*, defined as the tendency to blame oneself when the sexual aspects of one's life are unhealthy, negative, or undesirable in nature;
(10) *sexual monitoring*, defined as the tendency to be aware of the public impression which one's sexuality makes on others;
(11) *sexual motivation*, defined as the motivation and desire to be involved in a sexual relationship;
(12) *sexual problem management*, defined as the tendency to believe that one has the capacity/skills to effectively manage and handle any sexual problems that one might develop or encounter;
(13) *sexual esteem*, defined as a generalized tendency to positively evaluate one's own capacity to engage in healthy sexual behaviors and to experience one's sexuality in a satisfying and enjoyable way;
(14) *sexual satisfaction*, defined as the tendency to be highly satisfied with the sexual aspects of one's life;
(15) *power-other sexual control*, defined as the belief that the sexual aspects of one's life are controlled by others who are more powerful and influential than oneself;
(16) *sexual self-schemata*, defined as a cognitive framework that organizes and guides the processing of information about the sexual-related aspects of oneself;

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(17) *fear of sex*, defined as a fear of engaging in sexual relations with another individual;
(18) *sexual problem prevention*, defined as the belief that one has the ability to prevent oneself from developing any sexual problems or disorders;
(19) *sexual depression*, defined as the experience of feelings of sadness, unhappiness, and depression regarding one's sex life; and
(20) *internal sexual control*, defined as the belief that the sexual aspects of one's life are determined by one's own personal control.

Development

The MSSCQ (Snell, 1995) was developed based on prior work on individual differences in sexuality (Snell, Fisher, & Miller, 1991; Snell, Fisher, & Schuh, 1992; Snell, Fisher, & Walters, 1993; Snell & Papini, 1989). The MSSCQ consists of 100 self-statement items.

Response Mode and Timing

Subjects indicate how characteristic of them each statement is using a 5-point Likert-type scale, with each item scored from 0 to 4: 0 (*not at all characteristic of me*), 1 (*slightly characteristic of me*), 2 (*somewhat characteristic of me*), 3 (*moderately characteristic of me*), and 4 (*very characteristic of me*). People respond to the 100 items on the MSSCQ by marking their answers using the provided Likert-type scale. In most instances, the scale usually requires about 45–60 minutes to complete.

Scoring

Following the reverse coding of the designated items (Items 27, 47, 68, 77, 88, and 97) the items that make up each subscale are then averaged, so that higher scores correspond to greater amounts of each MSSCQ tendency. Scores on the 20 subscales can thus range from 0 to 4.

Within the larger MSSCQ, the items on the subscales are presented in alternating and ascending numerical order for each subscale (e.g., Subscale 1 consists of Items 1, 21, 41, 61, and 81).

A final question (Item 101) is used to assess which form of relationship (current, past, or imagined) the subject was referring to in responding to the statements.

The scale has also been translated into Farsi in consultation with the original author and administered to 325 couples in Iran (Ziaei, Khoei, Salehi, Farajzadegan, 2013). The data were subjected to an exploratory factor analysis with a Varimax rotation and yielded 18 subscales across 78 items. The Farsi version sexual self-concept dimensions include: sexual anxiety, sexual self-efficacy sexual consciousness, motivation to avoid risky sex, sexual preoccupation, sexual assertiveness, sexual optimism, sexual monitoring, sexual motivation, sexual problem management, sexual esteem, sexual satisfaction, sexual self-schemata, fear of sex, sexual problem prevention, sexual depression, and internal sexual control.

Reliability

The MSSCQ's initial internal consistency of the 20 subscales on the MSSCQ was determined by calculating Cronbach's alpha coefficients, among a sample of 473 undergraduate students (302 females; 170 males; one gender unspecified) from a small midwestern university in the United States (Snell, 1995). Most of the sample (85%) was between 16 and 25 years of age. With five items per subscale, the alphas for all subjects on the 20 subscales were: .84, .85, .78, .72, .88, .94, .84, .78, .84, .84, .89, .84, .88, .91, .85, .87, .85, .85, .85, and .76 (respectively), demonstrating good internal consistency (Snell, 1995).

Strong internal consistency of the subscales has been replicated within specialized populations, such as in a study of adult men who have sex with men ($N = 131$; *sexual self-efficacy* $\alpha = .89$; *sexual anxiety* $\alpha = .77$; Blashill et al., 2016); adult women of diverse sexual orientations ($N = 351$; *sexual self-efficacy* $\alpha = .88$; *sexual consciousness* $\alpha = .80$; *sexual motivation* $\alpha = .91$; *sexual self-schema* $\alpha = .82$; Parent, Talley, Schwartz, & Hancock, 2015); and undergraduate populations ($N = 791$; *sexual esteem* $\alpha = .92$; *sexual anxiety* $\alpha = .90$; Shepler & Perrone-McGovern, 2016). The Farsi version of the MSSCQ reported moderate to good internal consistency across the 18 subscales, with Cronbach's alphas ranging from .41–.87 (Ziaei et al., 2013).

Validity

Initial validity assessments of the MSSCQ found that among undergraduate students, the MSSCQ subscales were related to men's and women's contraceptive use (Snell, 1995). For instance, among males, a history of reliable, effective contraception was negatively associated with (1) *sexual anxiety*, (5) *chance/luck sexual control*, (17) *sexual fear*, and (19) *sexual depression*; and positively associated with (2) *sexual self-efficacy*, (8) *sexual optimism*, (11) *sexual motivation*, (13) *sexual esteem*, (14) *sexual satisfaction*, and (16) *sexual self-schemata*. In contrast, among females, long-term effective contraception use was negatively associated with (17) *sexual fear*, (19) *sexual depression*, and (20) *internal sexual control*; and positively associated with (2) *sexual self-efficacy*, (7) *sexual assertiveness*, (11) *sexual motivation*, (14) *sexual satisfaction*, and (16) *sexual self-schemata*.

Further validation has been established across a wide range of subsequent studies. In one study, the *sexual anxiety* subscale was associated with body dissatisfaction ($r = .31$), while the sexual *self-efficacy* subscale predicted less body dissatisfaction ($r = –.40$; Blashill et al., 2016). The *sexual optimism* and *sexual problem self-blame*

subscales have been associated with socially prescribed sexual perfectionism ($r = -.19$ and .36, respectively) and sexual depression ($r = -.60$ and .28, respectively; Stoeber, Harvey, Almeida, & Lyons, 2013). Another study found that the *sexual esteem* scale was significantly negatively associated with psychological distress ($r = -.44$) and positively associated with a global measure of self-esteem ($r = .47$; Shepler & Perrone-McGovern, 2016).

Over the past five years the scale has been cited in over 100 studies and has been used, in full form or selected subscales, in medical settings (e.g., cardiovascular populations; Steinke, Mosack, & Hill, 2013), clinical populations (e.g., individuals with severe mental illness; Bonfils, Firmin, Salyers, & Wright, 2015), and public health settings (e.g., family planning clinics; Gottlieb et al., 2011). The MSSCQ has also been implemented in prevention program evaluations (e.g., LaFrance, Loe, & Brown, 2012) and has been used to assess the validity of newly developed measures (e.g., Grauvogl, Peters, Evers, & van Lankveld, 2015).

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Exhibit

Multidimensional Sexual Self-Concept Questionnaire

The items in this questionnaire refer to people's sexuality. Please read each item carefully and decide to what extent it is characteristic of you. Give each item a rating of how much it applies to you by using the following scale:

	Not at all characteristic of me	Slightly characteristic of me	Somewhat characteristic of me	Moderately characteristic of me	Very characteristic of me
1. I feel anxious when I think about the sexual aspects of my life.	○	○	○	○	○
2. I have the ability to take care of any sexual needs and desires that I may have.	○	○	○	○	○
3. I am very aware of my sexual feelings and needs.	○	○	○	○	○

4.	I am motivated to avoid engaging in "risky" (i.e., unprotected) sexual behavior.	○	○	○	○	○
5.	The sexual aspects of my life are determined mostly by chance happenings.	○	○	○	○	○
6.	I think about sex "all the time."	○	○	○	○	○
7.	I'm very assertive about the sexual aspects of my life.	○	○	○	○	○
8.	I expect that the sexual aspects of my life will be positive and rewarding in the future.	○	○	○	○	○
9.	I would be to blame if the sexual aspects of my life were not going very well.	○	○	○	○	○
10.	I notice how others perceive and react to the sexual aspects of my life.	○	○	○	○	○
11.	I'm motivated to be sexually active.	○	○	○	○	○
12.	If I were to experience a sexual problem, I myself would be in control of whether this improved.	○	○	○	○	○
13.	I derive a sense of self-pride from the way I handle my own sexual needs and desire.	○	○	○	○	○
14.	I am satisfied with the way my sexual needs are currently being met.	○	○	○	○	○
15.	My sexual behaviors are determined largely by other more powerful and influential people.	○	○	○	○	○
16.	Not only would I be a good sexual partner, but it's quite important to me that I be a good sexual partner.	○	○	○	○	○
17.	I am afraid of becoming sexually involved with another person.	○	○	○	○	○
18.	If I am careful, then I will be able to prevent myself from having any sexual problems.	○	○	○	○	○
19.	I am depressed about the sexual aspects of my life.	○	○	○	○	○
20.	My sexuality is something that I am largely responsible for.	○	○	○	○	○
21.	I worry about the sexual aspects of my life.	○	○	○	○	○
22.	I am competent enough to make sure that my sexual needs are fulfilled.	○	○	○	○	○
23.	I am very aware of my sexual motivations and desires.	○	○	○	○	○
24.	I am motivated to keep myself from having any "risky" sexual behavior (e.g., exposure to sexual diseases).	○	○	○	○	○
25.	Most things that affect the sexual aspects of my life happen to me by accident.	○	○	○	○	○
26.	I think about sex more than anything else.	○	○	○	○	○
27.	I'm not very direct about voicing my sexual needs and preferences.	○	○	○	○	○
28.	I believe that in the future the sexual aspects of my life will be healthy and positive.	○	○	○	○	○

29.	If the sexual aspects of my life were to go wrong, I would be the person to blame.	○	○	○	○	○
30.	I'm concerned with how others evaluate my own sexual beliefs and behaviors.	○	○	○	○	○
31.	I'm motivated to devote time and effort to sex.	○	○	○	○	○
32.	If I were to experience a sexual problem, my own behavior would determine whether I improved.	○	○	○	○	○
33.	I am proud of the way I deal with and handle my own sexual desires and needs.	○	○	○	○	○
34.	I am satisfied with the status of my own sexual fulfillment.	○	○	○	○	○
35.	My sexual behaviors are largely controlled by people other than myself (e.g., my partner, friends, family).	○	○	○	○	○
36.	Not only would I be a skilled sexual partner, but it's very important to me that I be a skilled sexual partner.	○	○	○	○	○
37.	I have a fear of sexual relationships.	○	○	○	○	○
38.	I can pretty much prevent myself from developing sexual problems by taking good care of myself.	○	○	○	○	○
39.	I am disappointed about the quality of my sex life.	○	○	○	○	○
40.	The sexual aspects of my life are determined in large part by my own behavior.	○	○	○	○	○
41.	Thinking about the sexual aspects of my life often leaves me with an uneasy feeling.	○	○	○	○	○
42.	I have the skills and ability to ensure rewarding sexual behaviors for myself.	○	○	○	○	○
43.	I tend to think about my own sexual beliefs and attitudes.	○	○	○	○	○
44.	I want to avoid engaging in sex where I might be exposed to sexual diseases.	○	○	○	○	○
45.	Luck plays a big part in influencing the sexual aspects of my life.	○	○	○	○	○
46.	I tend to be preoccupied with sex.	○	○	○	○	○
47.	I am somewhat passive about expressing my own sexual desires.	○	○	○	○	○
48.	I do not expect to suffer any sexual problems or frustrations in the future.	○	○	○	○	○
49.	If I were to develop a sexual disorder, then I would be to blame for not taking good care of myself.	○	○	○	○	○
50.	I am quick to notice other people's reactions to the sexual aspects of my own life.	○	○	○	○	○
51.	I have a desire to be sexually active.	○	○	○	○	○
52.	If I were to become sexually maladjusted, I myself would be responsible for making myself better.	○	○	○	○	○
53.	I am pleased with how I handle my own sexual tendencies and behaviors.	○	○	○	○	○

54.	The sexual aspects of my life are personally gratifying to me.	○	○	○	○	○
55.	My sexual behavior is determined by the actions of powerful others (e.g., my partner, friends, family).	○	○	○	○	○
56.	Not only could I relate well to a sexual partner, but it's important to me that I be able to do so.	○	○	○	○	○
57.	I am fearful of engaging in sexual activity.	○	○	○	○	○
58.	If just I look out for myself, then I will be able to avoid any sexual problems in the future.	○	○	○	○	○
59.	I feel discouraged about my sex life.	○	○	○	○	○
60.	I am in control of and am responsible for the sexual aspects of my life.	○	○	○	○	○
61.	I worry about the sexual aspects of my life.	○	○	○	○	○
62.	I am able to cope with and to handle my own sexual needs and wants.	○	○	○	○	○
63.	I'm very alert to changes in my sexual thoughts, feelings, and desires.	○	○	○	○	○
64.	I really want to prevent myself from being exposed to sexual diseases.	○	○	○	○	○
65.	The sexual aspects of my life are largely a matter of (good or bad) fortune.	○	○	○	○	○
66.	I'm constantly thinking about having sex.	○	○	○	○	○
67.	I do not hesitate to ask for what I want in a sexual relationship.	○	○	○	○	○
68.	I will probably experience some sexual problems in the future.	○	○	○	○	○
69.	If I were to develop a sexual problem, then it would be my own fault for letting it happen.	○	○	○	○	○
70.	I'm concerned about how the sexual aspects of my life appear to others.	○	○	○	○	○
71.	It's important to me that I involve myself in sexual activity.	○	○	○	○	○
72.	If I developed any sexual problems, my recovery would depend in large part on what I myself would do.	○	○	○	○	○
73.	I have positive feelings about the way I approach my own sexual needs and desires.	○	○	○	○	○
74.	The sexual aspects of my life are satisfactory, compared to most people's.	○	○	○	○	○
75.	In order to be sexually active, I have to conform to other more powerful individuals.	○	○	○	○	○
76.	I am able to "connect" well with a sexual partner, and it's important to me that I am able to do so.	○	○	○	○	○
77.	I don't have much fear about engaging in sex.	○	○	○	○	○
78.	I will be able to avoid any sexual problems, if I just take good care of myself.	○	○	○	○	○

79.	I feel unhappy about my sexual experiences.	○	○	○	○	○
80.	The main thing which affects the sexual aspects of my life is what I myself do.	○	○	○	○	○
81.	I feel nervous when I think abut the sexual aspects of my life.	○	○	○	○	○
82.	I have the capability to take care of my own sexual needs and desires.	○	○	○	○	○
83.	I am very aware of the sexual aspects of myself (e.g. habits, thoughts, beliefs).	○	○	○	○	○
84.	I am really motivated to avoid any sexual activity that might expose me to sexual diseases.	○	○	○	○	○
85.	The sexual aspects of my life are a matter of fate (destiny).	○	○	○	○	○
86.	I think about sex the majority of the time.	○	○	○	○	○
87.	When it comes to sex, I usually ask for what I want.	○	○	○	○	○
88.	I anticipate that in the future the sexual aspects of my life will be frustrating.	○	○	○	○	○
89.	If something went wrong with my own sexuality, then it would be my own fault.	○	○	○	○	○
90.	I'm aware of the public impression created by my own sexual behaviors and attitudes.	○	○	○	○	○
91.	I strive to keep myself sexually active.	○	○	○	○	○
92.	If I developed a sexual disorder, my recovery would depend on how I myself dealt with the problem.	○	○	○	○	○
93.	I feel good about the way I express my own sexual needs and desires.	○	○	○	○	○
94.	I am satisfied with the sexual aspects of my life.	○	○	○	○	○
95.	My sexual behavior is mostly determined by people who have influence and control over me.	○	○	○	○	○
96.	Not only am I capable of relating to a sexual partner, but it's important to me that I relate very well.	○	○	○	○	○
97.	I'm not afraid of becoming sexually active.	○	○	○	○	○
98.	If I just pay careful attention, I'll be able to prevent myself from having any sexual problems.	○	○	○	○	○
99.	I feel sad when I think about my sexual experiences.	○	○	○	○	○
100.	My sexuality is something that I myself am in charge of	○	○	○	○	○

101. I responded to the previous items based on:

○ A current relationship
○ A past close relationship
○ An imagined close relationship

Sexual Narcissism Scale

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Narcissism—a personality style characterized by tendencies toward exploiting others, a general lack of empathy for others, a pervasive pattern of grandiosity, and an excessive need for admiration—has numerous implications for sexual behavior (e.g., Baumeister, Catanese, & Wallace, 2002). Yet, owing to the situation-specific nature of personality (Mischel & Shoda, 1995), global assessments of narcissism may be imprecise tools for assessing the extent to which the components of narcissism are active in the sexual domain. In an effort to allow researchers to demonstrate more consistent links between narcissism and sexual behavior, we developed the Sexual Narcissism Scale (SNS; Widman & McNulty, 2010).

The 20-item SNS assesses the extent to which self-centered, narcissistic personality traits are manifested in sexual situations. The SNS comprises four 5-item subscales: (a) *Sexual Exploitation*, (b) *Sexual Entitlement*, (c) *Low Sexual Empathy*, and (d) *Sexual Skill*. The *Sexual Exploitation* subscale assesses the ability and willingness to manipulate a person to gain sexual access. The *Sexual Entitlement* subscale assesses a sense of sexual entitlement and belief that the fulfillment of one's sexual desires is a personal right. The *Low Sexual Empathy* subscale assesses a general lack of empathy and devaluation of sexual partners. The *Sexual Skill* subscale assesses a tendency to hold a grandiose sense of sexual skill or an exaggerated sense of sexual success.

Development

The SNS was developed in several samples of U.S. college students (Widman & McNulty, 2010), though it has since been used among community populations (Day, Muise, & Impett, 2017; McNulty & Widman, 2013, 2014) and translated into German (Imhoff, Bergmann, Banse, & Schmidt, 2013). For initial scale development, we began by generating a large item pool to map on to our four theoretically derived subscales. Then we selected the 40 items that performed best based on systematic item pilot testing ($N = 137$; 45% men). Next, in a sample of 299 college students (51% men), we subjected the 40 sexual narcissism items to a confirmatory factor analysis (CFA) to identify and remove poor fitting items. This resulted in a final 20-item scale.

Response Mode and Timing

Items are rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Respondents should be instructed to choose the Likert rating that best describes their current attitudes or beliefs and assured that there are no right or wrong sexual attitudes. The SNS generally takes less than 5 minutes to complete.

Scoring

Items are coded such that higher scores indicate greater sexual narcissism. Two reverse-scored items are included to help control response sets (Item 12 and Item 15). After reversing these items, a total score is calculated by summing all items (possible range = 20–100).

Individual subscale scores are computed by summing the five items from each subscale (possible subscale range = 5–25). Specifically, the subscale items are as follows: *Sexual Exploitation*: 3, 6, 9, 10, 19; *Sexual Entitlement*: 4, 11, 13, 14, 17; *Low Sexual Empathy*: 5, 7, 12, 15, 20; *Sexual Skill*: 1, 2, 8, 16, 18.

Reliability

We reported evidence supportive of the factor structure of the SNS using confirmatory factor analyses in a sample of 299 male and female virgin and nonvirgin college students (Widman & McNulty, 2010). Adequate fit of the four-factor model was observed for the entire sample ($N = 299$, *MFF* $\chi^2[164] = 433.47$, $p < .01$, χ^2/df ratio = 2.64, CFI = .95, RMSEA = .077), and individually for men ($N = 152$, MFF $\chi^2[164] = 282.29$, $p < .01$, χ^2/df ratio = 1.76, CFI = .94, RMSEA = .07), women ($N = 147$, MFF $\chi^2[164] = 323.39$, $p < .01$, χ^2/df ratio = 1.97, CFI = .93, RMSEA = .08), nonvirgins ($N = 206$, MFF $\chi^2[164] = 377.90$, $p < .01$, χ^2/df ratio = 2.30, CFI = .93, RMSEA = .082), and virgins ($N = 93$, MFF $\chi^2[164] = 310.63$, $p < .01$, χ^2/df ratio = 1.89, CFI = .90, RMSEA = .095). Adequate internal consistency of the SNS has now been demonstrated in multiple independent samples of college students (Imhoff et al., 2013; Widman & McNulty, 2010) and adults (Day et al., 2017; McNulty & Widman, 2013, 2014). Cronbach's alpha for the full scale has ranged from .75 to .88, and Cronbach's alpha has also been acceptable for each subscale (*Sexual Exploitation* αs = .72–.78; *Sexual Entitlement* αs = .76–.84; *Low Sexual Empathy* αs = .70–.79; *Sexual Skill* αs = .80–.89).

Validity

The SNS has demonstrated convergent, divergent, and predictive validity. Regarding convergent validity, in a sample of 163 college men the SNS demonstrated strong

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positive correlations with another published scale of sexual narcissism, the Index of Sexual Narcissism (Hurlbert, Apt, Gasar, Wilson, & Murphy, 1994), $r = .72$, $p < .001$, and with the Narcissistic Personality Instrument (Raskin & Terry, 1988), $r = .41$, $p < .001$. These results suggest the SNS is related to but unique from existing measures of narcissism. Regarding divergent validity, the SNS demonstrated null or weak relationships with each of the Big Five personality traits using the same sample of 163 college men (Extraversion $r = –.04$, Agreeableness $r = –.24$, Conscientiousness $r = –.09$, Neuroticism $r = .21$, Openness $r = .03$), suggesting that sexual narcissism can emerge independent of these traits. Finally, the SNS has demonstrated predictive validity in several samples. In a longitudinal examination of 123 married couples, those higher in sexual narcissism were more likely to report subsequent infidelity (McNulty & Widman, 2014) and declines in subsequent marital and sexual satisfaction (McNulty & Widman, 2013). Further, in a study of 378 college men, those higher in sexual narcissism reported more frequent past sexual aggression (including unwanted sexual contact, sexual coercion, and attempted/ completed rape) and a greater likelihood of future sexual aggression (Widman & McNulty, 2010).

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Exhibit

Sexual Narcissism Scale

The following questions are about your views of yourself as a sexual person. There are no right or wrong answers. Use the scale that follows to indicate how much you agree or disagree with each statement:

	1 Strongly Disagree	2 Somewhat Disagree	3 Neutral	4 Somewhat Agree	5 Strongly Agree
1. I am an exceptional sexual partner.	○	○	○	○	○
2. My sexual partners think I am fantastic in bed.	○	○	○	○	○
3. When I want to have sex, I will do whatever it takes.	○	○	○	○	○
4. I am entitled to sex on a regular basis.	○	○	○	○	○
5. When I sleep with someone, I rarely know what they are thinking or feeling.	○	○	○	○	○
6. I would be willing to trick a person to get them to have sex with me.	○	○	○	○	○
7. The feelings of my sexual partners don't usually concern me.	○	○	○	○	○
8. I have been very successful in my sexual relationships.	○	○	○	○	○
9. If I ruled the world for one day, I would have sex with anyone I choose.	○	○	○	○	○
10. One way to get a person in bed with me is to tell them what they want to hear.	○	○	○	○	○
11. I would be irritated if a dating partner said no to sex.	○	○	○	○	○
12. It is important for me to know what my sexual partner is feeling when we make love.	○	○	○	○	○

13. I should be permitted to have sex whenever I want it.	○	○	○	○	○
14. I expect sexual activity if I go out with someone on an expensive date.	○	○	○	○	○
15. I enjoy sex more when I feel I really know the person.	○	○	○	○	○
16. I really know how to please a partner sexually.	○	○	○	○	○
17. I feel I deserve sexual activity when I am in the mood for it.	○	○	○	○	○
18. Others have told me I am very sexually skilled.	○	○	○	○	○
19. I could easily convince an unwilling person to have sex with me.	○	○	○	○	○
20. I do not usually care how my sexual partner feels after sex.	○	○	○	○	○

Sexual Self-Esteem Inventory and the Sexual Self-Esteem Inventory—Short Form

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The Sexual Self-Esteem Inventory (SSEI) assesses affective reactions to subjective appraisals of sexual thoughts, feelings, and behaviors. The inventory has five domains (subscales) that contribute to overall sexual self-esteem (SSE): Skill/Experience, Attractiveness, Control, Moral Judgement, and Adaptiveness (Zeanah & Schwarz, 1996).

Development

Initially developed for women, 120 face-valid items were administered to 223 college women. Items were eliminated that did not contribute to internal consistency, were highly correlated with other subscale items, or were moderately or highly correlated with a measure of socially desirable response. Principal-component factor analysis manifested a five-factor structure with each subscale representing a different oblique factor of sexual self-esteem, and each subscale demonstrated strong internal consistency (Zeanah, 1992). The revised measure was administered to a new sample of college women (N = 345) to further assess psychometric properties and establish initial evidence of discriminant and construct validity, resulting in the final 81-item SSEI for Women (Zeanah, 1992; Zeanah & Schwarz, 1996).

The 35-item short form of the SSEI-W was created by reviewing inter-item correlations and retaining the seven items that maintained the best internal consistency for each subscale. Using a college student sample including males, the subscales on the short form demonstrated comparable reliability to the original, long form for males and females (Ns = 127–141; Schwarz, Drwal, & Zeanah, 1998). See Table 1 for details.

TABLE 1
Alpha Coefficients for Long and Short Subscales of the Sexual Self-Esteem Inventory (College Student Sample)

Subscale[a]	Full subscales # items	Males	Females	Short subscales # items	Males	Females
Skill & Experience	18	.94	.92	7	.88	.84
Attractiveness	17	.94	.94	7	.88	.88
Control	17	.87	.88	7	.73	.80
Moral Judgement	14	.79	.84	7	.77	.80
Adaptiveness	15	.90	.89	7	.81	.80
Total Scale	81	.97	.97	35	.94	.92

Note. From Schwarz et al. (1998)
[a]Ns = 127–141

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Response Mode and Timing

Participants rate agreement with each statement using a 6-point Likert scale: 1 (*strongly disagree*) to 6 (*strongly agree*). Completion time for the 81-item measure is 15 to 20 minutes; for the 35-item short form, it is approximately 10 minutes.

Scoring

Raw score items for each subscale are totaled, reverse scoring the appropriate items as indicated below. The mean subscale score can be substituted for blank items; however, if more than one-third of items are left blank, that subscale score will be invalid. Total Scale Score is obtained by averaging the subscale scores. Higher scores reflect higher sexual self-esteem.

***Skill/Experience* subscale**
Long form (18 items) 16, 21, 26, 39, 47, 52, 60, 63, 78; reverse score: 1, 6, 11, 29, 34, 44, 56, 68, 73

Short form (7 items) 26, 39, 52, 63; reverse score: 44, 56, 73

***Attractiveness* subscale**
Long form (17 items) 2, 12, 45, 64, 69, 74; reverse score: 7, 17, 22, 27, 30, 35, 40, 48, 53, 57, 79

Short form (7 items) 2, 45, 64; reverse score: 27, 48, 53, 57

***Control* subscale**
Long form (16 items) 3, 18, 61, 65; reverse score: 8, 13, 23, 31, 36, 41, 49, 54, 58, 70, 75, 80

Short form (7 items) 18; reverse score: 8, 13, 41, 58, 70, 80

***Moral Judgement* subscale**
Long form (15 items) 10, 15, 38, 51, 67, 76, 81; reverse score: 5, 20, 25, 33, 43, 55, 62, 72

Short form (7 items) 15, 67, 76, 81; reverse score: 5, 43, 62

***Adaptiveness* subscale**
Long form (15 items) 9, 14, 19, 24, 66, 77; reverse score: 4, 28, 32, 37, 42, 46, 50, 59, 71

Short form (7 items) 14, 19, 66, 77; reverse score: 28, 32, 59

Reliability

SSEI subscales show strong internal consistency in samples of women who have experienced sexual abuse (Shapiro & Schwarz, 1997; Van Bruggen, Runtz, & Kagle, 2006; Zeanah, 1992), college men (Schwarz et al., 1998), and substance-abusing women (James, 2011).

Reliability of the SSEI-SF is demonstrated in studies with college women and men (Schwarz et al., 1998) (see Table 1) and with adolescents (Swensen, Houck, Barker, Zeanah, & Brown, 2012).

Additionally, the reliability of the SSEI is demonstrated for women in Belgium (Hannier, Baltus, & De Sutter, 2018), Canada (Van Bruggen et al., 2006), and Iran (Firoozi, Azmoude, & Asgharipoor, 2016). Similarly, studies find the SSEI-SF is reliable in German (Bornefeld-Ettman et al., 2018) and Iranian samples (Farokhi & Shareh, n.d.).

Validity

Predicted relationships between sexual abuse and specific sexual self-esteem domains are found with a subsample ($n = 95$) of sexually abused women (Zeanah, 1992), and in similar studies (Bornefeld-Ettman et al., 2018; Shapiro & Schwarz, 1997; Shareh, 2016; Van Bruggen et al., 2006). Additionally, validity is demonstrated with SSEI domains and sexual experiences (Reese-Weber & McBride, 2015; Swensen et al., 2012); marital satisfaction (Zarbakhsh, Dinani, & Rahmani, 2013); weight and body perceptions (Hannier et al., 2018; Jafari, Khodarahimi, & Rasti 2016), religious commitment (Abbot, Harris, & Mollen, 2016), personality traits (Bornefeld-Ettman et al., 2018; Farokhi & Shareh, n.d.; Firoozi et al., 2016) and parenting a child with developmental needs (Tavakolizadeh & Nejad, 2016).

Summary

The short and long forms of the SSEI demonstrate reliability and validity in studies across diverse populations, including males. Further research on developmental experiences and factors associated with higher and lower domains of SSE and clinical intervention approaches is warranted.

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Exhibit

Sexual Self Esteem Inventory

Instructions: This questionnaire asks you to rate your feelings about several aspects of sexuality. You are not asked to describe your actual experiences, but instead to rate your reactions and feelings about your experiences, whatever they might be. In this questionnaire, "sex" and "sexual activity" refer to the variety of sexual behaviors, including kissing, hugging, and caressing as well as sexual intercourse. Current sexual activity is not necessary to answer the questions. There are no right or wrong answers; reactions to feelings about sexuality are normally quite varied. What is important are your reactions to your own personal experiences, thoughts, and feelings.

Please answer each question as honestly as possible. Using the scale near the top of each page, select the response which most closely corresponds to the way you feel about each statement. Write the number for that response in the space next to the statement.

	1 Strongly disagree	2 Moderately disagree	3 Mildly disagree	4 Mildly agree	5 Moderately agree	6 Strongly agree
1. I wish I were better at sex.	○	○	○	○	○	○
2. I am pleased with my physical appearance.	○	○	○	○	○	○
3. I feel sure of what I want sexually.	○	○	○	○	○	○
4. I wish things were different for me sexually.	○	○	○	○	○	○
5. I feel guilty about my sexual thoughts and feelings.	○	○	○	○	○	○
6. I feel disappointed with my sex life.	○	○	○	○	○	○
7. I wish I were sexier.	○	○	○	○	○	○
8. I feel emotionally vulnerable in a sexual encounter.	○	○	○	○	○	○
9. I am where I want to be sexually, at this point in my life.	○	○	○	○	○	○
10. I don't think there's anything wrong with my sexual feelings.	○	○	○	○	○	○
11. After a sexual encounter, I feel like something is missing.	○	○	○	○	○	○
12. I like my body.	○	○	○	○	○	○
13. I am afraid of losing control sexually.	○	○	○	○	○	○
14. I feel good about the place of sex in my life.	○	○	○	○	○	○
15. My sexual behaviors are in line with my moral values.	○	○	○	○	○	○
16. I am happy about my sex life.	○	○	○	○	○	○
17. If I could, I would change some parts of my body.	○	○	○	○	○	○

18.	I feel I can usually judge how my partner will regard my wishes about how far to go sexually.	○	○	○	○	○	○
19.	I like what I have learned about myself from my sexual experiences.	○	○	○	○	○	○
20.	I worry a great deal about sexual matters.	○	○	○	○	○	○
21.	I feel self-assured about my sexual abilities.	○	○	○	○	○	○
22.	I am surprised when someone finds me attractive.	○	○	○	○	○	○
23.	At times I have been afraid of what I might do sexually.	○	○	○	○	○	○
24.	All in all, I feel satisfied with my sex life.	○	○	○	○	○	○
25.	I am sorry I lost (or would be sorry to lose) my virginity.	○	○	○	○	○	○
26.	I feel I am pretty good at sex.	○	○	○	○	○	○
27.	I hate my body.	○	○	○	○	○	○
28.	I don't feel ready for some of the things I am doing sexually.	○	○	○	○	○	○
29.	I wish I knew as much as my friends about pleasing a partner sexually.	○	○	○	○	○	○
30.	There are parts of my body I feel embarrassed about.	○	○	○	○	○	○
31.	I feel I could easily be talked into sexual activities I don't want.	○	○	○	○	○	○
32.	Sometimes I wish I could forget about sex.	○	○	○	○	○	○
33.	I feel embarrassed about some of my sexual thoughts.	○	○	○	○	○	○
34.	During a sexual encounter, I feel self-conscious.	○	○	○	○	○	○
35.	I am much less attractive than I would like to be.	○	○	○	○	○	○
36.	When I am in a sexual situation, I feel confused about what I want.	○	○	○	○	○	○
37.	I find my own sexuality a bit scary.	○	○	○	○	○	○
38.	I never feel bad about my sexual behavior.	○	○	○	○	○	○
39.	I feel that "sexual techniques" come easily to me	○	○	○	○	○	○
40.	I am happy with the way I look.	○	○	○	○	○	○
41.	I feel physically vulnerable in a sexual encounter.	○	○	○	○	○	○
42.	The "sexual me" is not the "real me."	○	○	○	○	○	○
43.	Some of the things I do in sexual situations are morally wrong.	○	○	○	○	○	○
44.	Sexually, I feel like a failure.	○	○	○	○	○	○
45.	I am pleased with the way my body has developed.	○	○	○	○	○	○
46.	I feel troubled about the sexual aspects of my life.	○	○	○	○	○	○
47.	I feel much satisfaction from my sexual life.	○	○	○	○	○	○
48.	I would like to trade bodies with someone else.	○	○	○	○	○	○
49.	In a sexual situation, I know what I want but don't know how to get it.	○	○	○	○	○	○
50.	Sexual relationships have caused more trouble for me than they're worth.	○	○	○	○	○	○
51.	I have no regrets about the things I have done sexually.	○	○	○	○	○	○
52.	I do pretty well at expressing myself sexually.	○	○	○	○	○	○
53.	I worry that some parts of my body would be disgusting to a sexual partner.	○	○	○	○	○	○
54.	I am uncomfortable in letting my partner know what I want sexually.	○	○	○	○	○	○
55.	I think I am too "easy."	○	○	○	○	○	○
56.	I feel embarrassed about my lack of sexual experience.	○	○	○	○	○	○
57.	I would be happier if I looked better.	○	○	○	○	○	○
58.	I worry that I won't be able to stop something I don't want to do in a sexual situation.	○	○	○	○	○	○
59.	I wish sex were less a part of my life.	○	○	○	○	○	○
60.	I feel good about initiating sexual activity.	○	○	○	○	○	○

61.	I feel okay about telling my partner what I want in a sexual situation.	○	○	○	○	○	○
62.	I have punished myself for my sexual thoughts, feelings, and/or behaviors.	○	○	○	○	○	○
63.	I feel good about my ability to satisfy my sexual partner.	○	○	○	○	○	○
64.	I am proud of my body.	○	○	○	○	○	○
65.	I am able to get what I want sexually when I want it.	○	○	○	○	○	○
66.	I am glad that feelings about sex have become a part of my life now.	○	○	○	○	○	○
67.	I never feel bad about my sexual behaviors.	○	○	○	○	○	○
68.	In a sexual situation, I am not sure what to do.	○	○	○	○	○	○
69.	When I get dressed up, I feel good about the way I look.	○	○	○	○	○	○
70.	I worry that things will get out of hand because I can't always tell what my partner wants in a sexual situation.	○	○	○	○	○	○
71.	Other people have an easier time with their sex lives than I do.	○	○	○	○	○	○
72.	I worry that some of my sexual fantasies are perverted.	○	○	○	○	○	○
73.	I wish I could relax in sexual situations.	○	○	○	○	○	○
74.	I am attractive enough.	○	○	○	○	○	○
75.	My partner seems to get the wrong message about what I want sexually.	○	○	○	○	○	○
76.	I never feel guilty about my sexual feelings.	○	○	○	○	○	○
77.	In general, I feel my sexual experiences have given me a more positive view of myself.	○	○	○	○	○	○
78.	I think I am good at giving sexual pleasure to my partner.	○	○	○	○	○	○
79.	I would like to look a lot better.	○	○	○	○	○	○
80.	I worry that I will be taken advantage of sexually.	○	○	○	○	○	○
81.	From a moral point of view, my sexual feelings are acceptable to me.	○	○	○	○	○	○

Sexuality Scale

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The Sexuality Scale (SS; Snell & Papini, 1989) is an objective, self-report instrument measuring three aspects of human sexuality: *sexual esteem* (positive regard for and confidence in the capacity to experience one's sexuality in a satisfying and enjoyable way), *sexual depression* (the experience of feelings of sadness, unhappiness, and depression regarding one's sex life), and *sexual preoccupation* (the tendency to think about sex to an excessive degree).

Development

To confirm the three conceptual dimensions assumed to underlie the SS, the 30 items were subjected to a principal components factor analysis (Snell & Papini, 1989). A three-factor solution was specified and rotated to an orthogonal simple structure with the varimax procedure. The first factor, characterized by the 10 items of the *Sexual-Esteem* subscale, had an eigenvalue of 8.39 and

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accounted for 56 percent of the common variance, with coefficients ranging from .52 to .82 (average coefficient = .69). The second factor, characterized by the 10 items of the *Sexual-Preoccupation* sub-scale, had an eigenvalue of 4.75 and accounted for 32 percent of the common variance, with an average loading of .65 (range = .41 to .86). The third factor included the *Sexual-Depression* items, accounted for 13 percent of the common variance, and had an eigenvalue of 1.88. Eight of the 10 items on the *Sexual-Depression* subscale had loadings ranging from .48 to .84; average coefficient = .67. The other two items had loadings less than .20, and thus it was decided to consider them "filler items."

Response Mode and Timing

The SS consists of 30 statements. Respondents are asked to indicate how much they agree (versus disagree) with each statement using a 5-point Likert scale. Responses for each item are scored as +2 (*agree*), +1 (*slightly agree*), 0 (*neither agree nor disagree*), –1 (*slightly disagree*), –2 (*disagree*). The scale can be completed in about 15–20 minutes on computer or using paper and pencil.

Scoring

After reverse coding items designated with an "R," the relevant items on each subscale can then be coded so that A = –2; B = –1; C = 0; D = +1; and E = +2. Next, the items on each subscale are summed, so that higher scores correspond to greater sexual esteem, sexual depression, and sexual preoccupation. Scores on the *Sexual-Esteem* scale (Items 1, 4, 7, 10R, 13R, 16, 19R, 22, 25R, 28R) and *Sexual-Preoccupation* scale (Items 3, 6, 9R, 12, 15, 18, 21R, 24R, 27R, 30R) can range from –20 to +20; scores on the *Sexual-Depression* scale (Items 2, 5R, 8, 17, 20, 23R, 26, 29R) range from –16 to +16.

An abbreviated version of the three subscales was developed by Wiederman and Allgeier (1993). The 15-item SS short-form includes the following items: *Sexual Esteem* (Items 1, 4, 16, 19R, 22); *Sexual Depression* (Items 2, 5R, 8, 17, 23R); and *Sexual Preoccupation* (Items 3, 6, 12, 15, 18).

Reliability

Using a sample of 296 participants (209 women and 87 men) drawn from lower division psychology courses at a small midwestern university in the United States (Snell & Papini, 1989), the internal consistency calculations of the three subscales (assessed by Cronbach's alpha) was based on 10-item scales, except for the measure of *Sexual Depression*, which consists of eight items. The alphas for the *Sexual-Esteem* scale were .92 for women, .93 for men, and .92 overall. For the *Sexual-Depression* subscale, the alphas were .88 for women, .94 for men, and .90 overall. The alphas for the *Sexual-Preoccupation* scale were .88 for women, .79 for men, and .88 overall.

Snell, Fisher, and Schuh (1992) provided additional reliability evidence for the SS: *Sexual Esteem* (alpha range = .91 to .92), *Sexual Depression* (alpha range = .85 to .93), and *Sexual Preoccupation* (alpha range = .87 to .91). Test–retest reliabilities, as reported by Snell et al. (1992), were .69 to .74 for *Sexual Esteem*, .67 to .76 for *Sexual Depression*, and .70 to .76 for *Sexual Preoccupation*. In brief, the three subscales had more than adequate internal consistency and test–retest reliability. More recently, additional studies have also found the SS to have strong reliability For example, using a sample of 293 female undergraduate students, the Sexual Esteem measure achieved an alpha of .94 (Muise, Preyde, Maitland, & Milhausen, 2010).

A Spanish language adaptation of the SS by Gómez-Zapian (2005) demonstrated good reliability as well: *Sexual Esteem* alpha = .83, *Sexual Expression* alpha = .87, and *Sexual Preoccupation* alpha = .71.

The 15-item short-form SS, with five items per subscale, had Cronbach's alphas for men and women, respectively, of .92 and .94 for *Sexual Esteem*, .89 and .89 for *Sexual Depression*, and .96 and .92 for *Sexual Preoccupation* (Wiederman & Allgeier, 1993).

Validity

Evidence for the validity of the SS comes from a variety of sources. Snell and Papini (1989) found that, among university students, women's and men's scores on *Sexual Esteem* and *Sexual Depression* were negatively correlated. However, for women, *Sexual Preoccupation* was positively correlated with *Sexual Esteem*. In contrast, for men, *Sexual Preoccupation* was positively correlated with *Sexual Depression*. Snell et al. (1992) provided evidence that the SS measures of *Sexual Esteem, Sexual Depression*, and *Sexual Preoccupation* were related in predictable ways to men's and women's sexual behaviors and attitudes; evidence for the discriminant validity of the SS was also documented by Snell et al. (1992). It has commonly been indicated that men score higher than do women on both the *Sexual-Esteem* (e.g., Kelly & Erickson, 2007; Morrison et al., 2004) and *Sexual-Preoccupation* scales (Wiederman & Allgeier, 1993).

The SS has been used within a therapy treatment context (Hurlbert, White, Powell, & Apt, 1993), and many studies have found a variety of associations between the three SS dimensions and other constructs. For instance, in a sample of women with and without disability, Moin, Duvdevany, and Mazor (2009) observed similar *Sexual Preoccupation* scores across the sample, but women with a physical disability scored significantly lower on *Sexual Esteem* and this difference was much more dramatic among younger compared to more mature women.

Higher sexual esteem has been associated with involvement in sexually coercive behavior among Spanish male

college students (Fuertes Martín, Ramos Vergeles, De La Orden Acevedo, Del Campo Sánchez, & Lázaro Visa, 2005); selecting sexual goals and values that are well aligned with personal sexual identity and needs among heterosexual female undergraduates (Muise et al, 2010); sexual experience (Morrison, Harriman, Morrison, Bearden, & Ellis, 2004); and a committed relationship status (Kelly & Erickson, 2007).

Lee and Forbey (2010) demonstrated an association between higher scores on sexual preoccupation and markers of distress, anxiety, and obsessiveness on the Minnesota Multiphasic Personality Inventory-2 (MMPI-2). In a sample of 846 American undergraduate students, they found a moderate association between *Sexual Preoccupation* and externalizing forms of psychopathology (e.g., impulsivity, antisocial attitudes, substance abuse, etc.) in both men and women. High scores on *Sexual Preoccupation* have also been associated with involvement in sexually coercive behavior among Spanish male college students (Fuertes Martín et al., 2005) and increased odds of stimulant use and using stimulants to cope with stressful events among men who have sex with men (Carrico et al., 2012).

Female undergraduate students with stronger feminist ideology and greater agency in their sexual encounters scored lower on *Sexual Depression* (Schick, Zucker, & Bay-Cheng, 2008).

Using the Spanish-language version of the SS, Gómez-Zapian (2005) examined how attachment style relates to the three dimensions. Women with an anxious-ambivalent attachment style scored low on *Sexual Esteem*, while anxiously attached men scored higher in *Sexual Preoccupation*. A secure attachment style was associated with higher *Sexual Esteem* and *Sexual Preoccupation* and with lower scores on sexual depression.

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Exhibit

Sexuality Scale

The statements listed below describe certain attitudes toward human sexuality which different people may have. As such, there are no right or wrong answers, only personal responses. For each item you will be asked to indicate how much you agree or disagree with the statement listed in that item. Use the following scale to provide your responses:

	(A) Agree	(B) Slightly Agree	(C) Neither Agree nor Disagree	(D) Slightly Disagree	(E) Disagree
1. I am a good sexual partner.	○	○	○	○	○
2. I am depressed about the sexual aspects of my life.	○	○	○	○	○

3. I think about sex all the time.	○	○	○	○	○
4. I would rate my sexual skill quite highly.	○	○	○	○	○
5. I feel good about my sexuality.	○	○	○	○	○
6. I think about sex more than anything else.	○	○	○	○	○
7. I am better at sex than most other people.	○	○	○	○	○
8. I am disappointed about the quality of my sex life.	○	○	○	○	○
9. I don't daydream about sexual situations.	○	○	○	○	○
10. I sometimes have doubts about my sexual competence.	○	○	○	○	○
11. Thinking about sex makes me happy.	○	○	○	○	○
12. I tend to be preoccupied with sex.	○	○	○	○	○
13. I am not very confident in sexual encounters.	○	○	○	○	○
14. I derive pleasure and enjoyment from sex.	○	○	○	○	○
15. I'm constantly thinking about having sex.	○	○	○	○	○
16. I think of myself as a very good sexual partner.	○	○	○	○	○
17. I feel down about my sex life.	○	○	○	○	○
18. I think about sex a great deal of the time.	○	○	○	○	○
19. I would rate myself low as a sexual partner.	○	○	○	○	○
20. I feel unhappy about my sexual relationships.	○	○	○	○	○
21. I seldom think about sex.	○	○	○	○	○
22. I am confident about myself as a sexual partner.	○	○	○	○	○
23. I feel pleased with my sex life.	○	○	○	○	○
24. I hardly ever fantasize about having sex.	○	○	○	○	○
25. I am not very confident about my sexual skill.	○	○	○	○	○
26. I feel sad when I think about my sexual experiences.	○	○	○	○	○
27. I probably think about sex less often than most people.	○	○	○	○	○
28. I sometimes doubt my sexual competence.	○	○	○	○	○
29. I am not discouraged about sex.	○	○	○	○	○
30. I don't think about sex very often.	○	○	○	○	○

Female Sexual Subjectivity Inventory and Male Sexual Subjectivity Inventory

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The 20-item Female Sexual Subjectivity Inventory (FFSI; Horne & Zimmer-Gembeck, 2006; Zimmer-Gembeck, See, & Sullivan, 2015) and the 20-item Male Sexual Subjectivity Inventory (MSSI; Zimmer-Gembeck & French, 2016) are designed to measure older adolescents' and young adults' understanding of themselves as sexual beings with choice, desire, and deserving of pleasure. Conceived of as aspects of psychological sexual health (although somewhat debated, e.g., see Erchull & Liss, 2014; Zimmer-Gembeck, O'Sullivan, Mastro, & Hewitt-Stubbs, 2016), five elements of sexual subjectivity are assessed with the FSSI and the MSSI, including sexual body-esteem, entitlement to self-pleasure, entitlement to pleasure from a partner, self-efficacy in achieving desire and pleasure, and sexual self-reflection. The measure can be referred to as a measure of sexual subjectivity, psychological sexual health, or sexual self-perceptions. The FSSI and MSSI were designed for use in studies of adolescents and young adults. However, the FSSI has also been used in at least one study with women ranging in age from 18 to 71 years (Satinsky & Jozkowski, 2015).

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Development

We created an initial set of FSSI items by reviewing the literature on intra-individual aspects of female psychosexual development (Martin, 1996; Tolman, 2002) and existing measures of intra-individual aspects of sexuality (e.g., Cyranowski & Andersen, 1998; Snell, Fisher, & Miller, 1991). In a first study, a pool of 56 items was developed and pilot tested with 192 females aged 16 to 19 years. In this study, factor analyses resulted in five factors and 23 items were retained. In a second study, 442 female undergraduate students (aged 16 to 20 years) completed FSSI items and factor analysis produced a five-factor solution with 20 items accounting for 66 percent of the variance in the items. The final 20-item FSSI has five items to assess sexual self-esteem, three items for entitlement to self-pleasure, four items for entitlement to pleasure from a partner, three items for self-efficacy in desire and pleasure, and five items for sexual self-reflection.

In a study of 216 female university students aged 17 to 22 years (Horne & Zimmer-Gembeck, 2006, Study 3), the 20 items were subjected to confirmatory factor analysis, testing multiple model structures. A five-factor model fit the data well, $\chi^2(160) = 379.34$, $p < 01$; $\chi^2/df = 2.4$, RMSEA = .08, NFI = .96, and CFI = .98, and had a significantly better fit than other models tested.

The MSSI was developed after the FSSI, beginning with all FSSI items plus 15 new items, which were generated to be more relevant to young men. In a first study of 304 males aged 17 to 25 years, exploratory factor analysis revealed a five-factor solution with four items highly loading on each factor. Thus, the MSSI has five subscales with four items per subscale. In a second study of 208 young men (aged 18 to 25 years), the MSSI was confirmed and a five-factor model had a good fit to the data, $\chi^2(154) = 243.0$, $p < .01$, $\chi^2/df = 1.6$, CFI = .94, and RMSEA = .053 (90% CI [.040,.065], $p = .34$).

Response Mode and Timing

The final MSSI and FSSI have 13 common items, with 7 items that are specific to only one of the measures. The FSSI and the MSSI can be completed using paper-and-pencil or online, and can be completed in about three minutes. Response options for all items are 1 or SD (*Strongly Disagree*), 2 or D (*Disagree*), 3 or N (*Neither Disagree or Agree*), 4 or A (*Agree)*, and 5 or SA (*Strongly Agree*). Items are designed so that they can be answered regardless of a participant's personal history with relationships or sexual behavior. All retained items on the FSSI and the MSSI are gender neutral. In one study, the MSSI performed well with both young women and young men (see Zimmer-Gembeck & French, 2016, Study 2).

Scoring

Items on the five subscales for the FSSI and the MSSI are averaged to form total scores. Some items are reverse scored. Higher scores indicate greater endorsement of positive esteem, feelings of entitlement, feelings of efficacy, and self-reflection. It is acceptable to select only some subscales for use.

On the FSSI: Items 1, 6, 11, 16, and 19 measure sexual body-esteem, with Items 1 and 6 reversed; Items 2, 7 and 12 measure entitlement to self-pleasure, Item 12 is reversed; Items 3, 8, 13 and 17 measure entitlement to pleasure from a partner, no item is reversed; Items 4, 9 and 14 measure self-efficacy in achieving desire and pleasure, no item is reversed; Items 5, 10, 15, 18 and 20 measure and sexual self-reflection, Items 10, 18 and 20 are reversed.

On the MSSI: Items 6, 11, 16 and 19 measure sexual body-esteem, with Items 6 and 11 reversed; Items 2, 7, 12 and 17 measure entitlement to self-pleasure, no item is reversed; Items 3, 5, 8 and 13 measure entitlement to pleasure from a partner, no item is reversed; Items 1, 4, 9 and 14 measure self-efficacy in achieving desire and pleasure, no item is reversed; Items 10, 15, 18 and 20 measure and sexual self-reflection, all four items are reversed.

Reliability

The FSSI and the MSSI have shown adequate reliability, with all Cronbach's alpha values ranging between .69 and .89 across nine studies in five publications (Horne & Zimmer-Gembeck, 2006; Mastro & Zimmer-Gembeck, 2015; Zimmer-Gembeck, Ducat, & Boislard, 2011; Zimmer-Gembeck & French, 2016; Zimmer-Gembeck et al., 2015). The only exception was the Cronbach's alpha of .57 for one subscale (sexual self-reflection) in the first pilot study of young Australian females (Horne & Zimmer-Gembeck, 2006). Short-term test–retest reliability has not been examined, but in one longitudinal study the correlations between FSSI subscales at T1 and T2 (12 to 14 months later) ranged from .43 to .75 (Zimmer-Gembeck et al., 2011). Cross-sectional correlations between the five subscales have ranged from –.05 to .53. All studies were conducted in groups of Australian adolescents and young adults; with majority Caucasian or Asian sociocultural background.

Validity

The five subscales of the FSSI and the MSSI have been validated using measures of sexual well-being and positive sexual behavior, as well as with general measures of well-being, identity development, relationship interactions, and views on gendered relationships. For the FSSI, all subscales, except sexual self-reflection, have been positively associated with measures such as sexual consciousness, safe-sex self-efficacy, self-esteem, identity achievement, and resistance to sexual double standards, with correlations ranging from approximately .20 to .65 (Horne & Zimmer-Gembeck, 2006, Study 2). All subscales (except sexual self-reflection) were also negatively associated with self-silencing in intimate relationships, with correlations

ranging from –.14 to –.36 (Horne & Zimmer-Gembeck, 2006, Study 2). Sexual self-reflection has been positively associated with some of these measures, including sexual consciousness, safe sex self-efficacy and resistance to sexual double standards, with correlations ranging from .19 to .37 (Horne & Zimmer-Gembeck, 2006, Study 2). In another study with the FSSI, sexual body-esteem, entitlement to pleasure from a partner, and self-efficacy in achieving pleasure were positively associated with sexual and romantic relationship satisfaction, with correlations ranging from .11 to .32 (Zimmer-Gembeck et al., 2011).

For the MSSI, all subscales have been positively associated with global self-esteem and identity achievement, whereas three subscales (sexual body-esteem, entitlement to self-pleasure, and self-efficacy in achieving pleasure) positively associated with life satisfaction, with correlations ranging from .14 to .60 (Zimmer-Gembeck & French, 2016, Study 2). All MSSI subscales were also associated with more sexual esteem (*r*s from .18 to .59), more condom-use self-efficacy (*r*s from .21 to .36, with the exception of sexual body-esteem), and less sexual depression (*r*s from –.31 to –.62; Zimmer-Gembeck & French, 2016, Study 2).

There are also associations of sexual subjectivity with sexual behavior and age, and there are some sex and sexual orientation differences in sexual subjectivity. With regards to sexual behavior, most subscales are higher with earlier age of first vaginal intercourse (Horne & Zimmer-Gembeck, 2005; Zimmer-Gembeck et al., 2011), and all subscales are higher with a history of a greater variety of sexual behaviors (Zimmer-Gembeck et al., 2011). For age, there have been small positive associations with some FSSI subscales (e.g., Zimmer-Gembeck et al., 2011, 2015). Regarding sex differences, young men have reported more entitlement to self-pleasure and self-efficacy in achieving pleasure than young women, and young women have reported more entitlement to pleasure from a partner than young men (Zimmer-Gembeck & French, 2016; Study 2). Regarding sexual orientation, young women who report that they are not exclusively attracted to men report higher sexual subjectivity across all five FSSI subscales when compared to heterosexual young women (Horne & Zimmer-Gembeck, 2006, Study 2).

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Exhibit

Female Sexual Subjectivity Inventory and Male Sexual Subjectivity Inventory

Female Sexual Subjectivity Inventory

These questions are about your ways of thinking about sexual behavior and relationships. They do *not* depend on having had any particular past experiences. Rather we are asking you about general feelings, opinions and values.

Please remember that your answers are anonymous, completely confidential and we would like to encourage honesty when answering.

There are no right or wrong answers. We are just interested in how you feel or what you think.

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
1. It bothers me that I'm not better looking.	○	○	○	○	○
2. It is okay for me to meet my own sexual needs through self-masturbation.	○	○	○	○	○
3. If a partner were to ignore my sexual needs and desires, I'd feel hurt.	○	○	○	○	○
4. I would not hesitate to ask for what I want sexually from a romantic partner.	○	○	○	○	○
5. I spend time thinking and reflecting about my sexual experiences.	○	○	○	○	○
6. I worry that I am not sexually desirable to others.	○	○	○	○	○
7. I believe self-masturbating can be an exciting experience.	○	○	○	○	○
8. It would bother me if a sexual partner neglected my sexual needs and desires.	○	○	○	○	○
9. I am able to ask a partner to provide the sexual stimulation I need.	○	○	○	○	○
10. I rarely think about the sexual aspects of my life.	○	○	○	○	○
11. Physically, I am an attractive person.	○	○	○	○	○
12. I believe self-masturbation is wrong.	○	○	○	○	○
13. I would expect a sexual partner to be responsive to my sexual needs and feelings.	○	○	○	○	○
14. If I were to have sex with someone, I'd show my partner what I want.	○	○	○	○	○
15. I think about my sexuality.	○	○	○	○	○
16. I am confident that a romantic partner would find me sexually attractive.	○	○	○	○	○
17. I think it is important for a sexual partner to consider my sexual pleasure.	○	○	○	○	○
18. I don't think about my sexual behavior very much.	○	○	○	○	○
19. I am confident that others will find me sexually desirable.	○	○	○	○	○
20. My sexual behavior and experiences are *not* something I spend time thinking about.	○	○	○	○	○

Male Sexual Subjectivity Inventory

These questions are about your ways of thinking about sexual behavior and relationships. They do *not* depend on having had any particular past experiences. Rather we are asking you about general feelings, opinions and values.

Please remember that your answers are anonymous, completely confidential and we would like to encourage honesty when answering.

There are no right or wrong answers. We are just interested in how you feel or what you think.

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
1. If it happened, I know I would be able to be clear about my sexual desires with a partner.	○	○	○	○	○
2. It is okay for me to meet my own sexual needs through self-masturbation.	○	○	○	○	○
3. If a partner were to ignore my sexual needs and desires, I'd feel hurt.	○	○	○	○	○
4. I would not hesitate to ask for what I want sexually from a romantic partner.	○	○	○	○	○
5. I would be concerned if my partner did not care about my sexual needs and feelings.	○	○	○	○	○

6.	I worry that I am not sexually desirable to others.	○	○	○	○	○
7.	I believe self-masturbating can be an exciting experience.	○	○	○	○	○
8.	It would bother me if a sexual partner neglected my sexual needs and desires.	○	○	○	○	○
9.	I am able to ask a partner to provide the sexual stimulation I need.	○	○	○	○	○
10.	I rarely think about the sexual aspects of my life.	○	○	○	○	○
11.	I worry about my sexual attractiveness.	○	○	○	○	○
12.	I believe self-masturbation can be a positive experience.	○	○	○	○	○
13.	I would expect a sexual partner to be responsive to my sexual needs and feelings.	○	○	○	○	○
14.	If I were to have sex with someone, I'd show my partner what I want.	○	○	○	○	○
15.	I try not to think about my sexual experiences much.	○	○	○	○	○
16.	I am confident that a romantic partner would find me sexually attractive.	○	○	○	○	○
17.	It is okay to enjoy self-masturbation.	○	○	○	○	○
18.	I don't think about my sexual behavior very much.	○	○	○	○	○
19.	I am not concerned about how I look when naked.	○	○	○	○	○
20.	My sexual behavior and experiences are *not* something I spend time thinking about.	○	○	○	○	○

24 Sexual Comfort and Erotophobia/Erotophilia

Sexual Anxiety Scale

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The Sexual Anxiety Scale (SAS) was developed to assess individuals' affective response to sexual cues, or erotophobia/philia. The term *erotophobia/philia* (EE) refers to the tendency to respond to sexual stimuli with either negative or positive affect (Fisher, Byrne, White, & Kelley, 1988), and the primary measure of EE to date has been the Sexual Opinion Survey (SOS; Fisher et al., 1988). Although it exhibits good psychometric properties, the SOS focuses primarily on responses to homosexuality, media with sexual content, and a small range of sexual behaviours. The SAS is a 56-item self-report measure that assesses affective response to a broader range of sexual cues in both the public and private domains.

Development

Items reflecting categories of sexual cues were written by members of our team and were then reviewed by two sexuality experts external to the team, resulting in the 56-item version of the scale. The SAS was administered to a sample of undergraduate students (N = 701) at a midsized university in Ontario, Canada as part of a large test battery. Reliability and validity were examined using a subset of the undergraduate students (n = 376, mean age 19.2, 51% female) and a community sample of adults (n = 188, mean age 38.9, 64% female).

Respondents rated the extent to which the sexual cues were likely to be avoided or approached and their degree of discomfort with the sexual cues, so that behavior/attitude discrepancies could be explored. The scores on the two sets of ratings were redundant, with correlations > .92 in all samples. As such, it was decided that the approach/avoidance ratings were not a useful addition to the measure and have been dropped from the final version.

A factor analysis was conducted using responses from the undergraduate and community samples (N = 889). This yielded a three-factor solution accounting for 49.5% of the variance. Factor 1, *Solitary and Impersonal Sexual Expression*, accounted for 35.8% of the variance in the SAS and consists of 23 items pertaining to pornographic and erotic material, masturbation, and impersonal sexual experiences. Factor 2, *Exposure to Information*, accounted for 8.1% of the variance in the SAS and consists of 14 items about giving or receiving information of a sexual nature. Factor 3, *Sexual Communication*, accounted for 5.6% of the variance and includes 16 items reflecting openness to consensual sexual activity and communicating sexual likes and dislikes. Subscales based on these factors were calculated and labeled accordingly. Factor 1 and Factor 2 were correlated at .34 in the undergraduate sample and .32 in the community sample. Factor 1 and Factor 3 were correlated at .68 in the undergraduate sample and .64 in the community sample. Factor 2 and Factor 3 were correlated at .40 in the undergraduate sample and .35 in the community sample. All correlations significant at $p < .01$. Means and standard deviations appear in Table 1.

TABLE 1
SAS Means and Standard Deviations

	Males		Females		Combined	
	M	***SD***	***M***	***SD***	***M***	***SD***
Undergraduates						
Total Score	2339.4	765.9	2775.3	858.4	2563.3	842.4
Factor 1	909.6	336.4	1318.2	447.6	1119.4	457.8
Factor 2	793.3	204.2	761.4	197.5	776.9	201.1
Factor 3	476.2	274.5	518.4	338.9	497.9	309.5
Community						
Total Score	1736.2	565.9	2058.3	704.6	1946.5	674.0
Factor 1	596.1	291.4	937.2	412.6	815.6	406.9
Factor 2	731.7	152.3	676.4	177.1	679.1	170.8
Factor 3	278.5	161.2	301.8	208.1	295.1	193.3

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Response Mode and Timing

Respondents rate their degree of discomfort with a list of sexually relevant situations or stimuli on an 11-point Likert-type scale ranging from 0 (*extremely pleasurable*) to 100 (*extremely discomforting*). The SAS takes between 5 and 15 minutes to complete.

Scoring

The SAS total score is calculated by summing the responses to all items. Higher scores indicate greater erotophobia. Individual subscale scores are calculated by summing the items included in the relevant scale (see Table 2). Items 4, 15, and 43 do not load on any subscales and are only included in the total score.

Reliability

The SAS showed strong internal consistency, with Cronbach's alphas of .96 in the undergraduate sample and .95 in the community sample. The subscale scores were equally strong, with alphas ranging from .87 to .95. Nelson and Purdon (2011) also found the SAS had strong internal consistency in a community sample of adults (α = .93). Test–retest reliability was examined in a subset of the undergraduate sample (n = 42), and suggested good stability of scores over time (r = .87, p < .01).

Validity

In order to establish discriminant validity, measures of mood (Depression, Anxiety, Stress Scale; Lovibond & Lovibond, 1995) and personality (International Personality Item Pool; Goldberg, 1999) were administered to both samples. SAS total scores were not simply a reflection of mood, showing only a very small correlation with anxiety, and were not a reflection of neuroticism or other personality traits (see Table 3 for additional details).

In order to establish construct validity, measures of various aspects of sexuality were administered. In the community sample, the SAS had a high correlation with the SOS. As well, lower SAS scores (i.e., greater erotophilia) were significantly correlated with greater sexual satisfaction (Global Measure of Sexual Satisfaction; Lawrance & Byers, 1995), less antigay prejudice (Heterosexual Attitudes Toward Homosexuality Scale; Larsen, 1998), better sexual functioning (Sexual Functioning Questionnaire; Lawrance & Byers, 1992), and more positive attitudes towards sex education of both male and female children (measure developed by the authors). Regression analyses indicated that the SAS, particularly the *Sexual Communication* subscale, was a better predictor of sexual functioning than was the SOS; otherwise, the two measures were equivalent in their prediction of sexual behaviour and attitudes (Purdon & Gordon, 2005).

In the undergraduate sample, lower SAS scores were significantly correlated with greater sexual satisfaction (Global Measure of Sexual Satisfaction; Lawrance & Byers, 1995), better sexual functioning (Golombok–Rust Inventory of Sexual Satisfaction; Rust & Golombok, 1998), greater knowledge about sexual issues (e.g., anatomy,

TABLE 2
Items Loading on Sexual Anxiety Scale Factors

Solitary and Impersonal Sexual Expression Factor Items	Exposure to Information Factor Items	Sexual Communication Factor Items
2	14	1
3	18	8
5	27	10
6	28	16
7	29	17
9	38	19
11	40	20
12	41	22
13	44	23
21	51	25
24	52	26
30	54	34
31	55	39
32	56	46
33		48
35		50
36		
37		
42		
45		
47		
49		
53		

TABLE 3
Correlations between the SAS and Measures of Mood and Personality

	Undergraduate Sample	Community Sample
Mood		
Depression	.06	.06
Anxiety	.16**	.11
Stress	.06	.03
Personality		
Extraversion	–.21**	–.34**
Agreeableness	.03	–.07
Conscientiousness	.07	–.04
Emotional stability	–.06	–.08
Intelligence	–.06	–.26**

**p < .01.

TABLE 4
Correlations between the SAS and Measures of Sexuality

Community sample	***r***
Sexual Opinion Survey	–.78**
Attitudes about sex education	
Educating males	–.31**
Educating females	–.32**
Sexual functioning	.22**
Sexual satisfaction	–.20**
Antigay prejudice	.22**
Undergraduate sample	
Effective use of birth control	–.34**
Effective use of STI protection	–.24**
Sexual functioning	
Males	.54**
Females	.25**
Sexual satisfaction	–.27**
Antigay prejudice	–.04

**$p < .01$.

contraception, pregnancy, STIs; measure developed by the authors), and more frequent use of birth control and STI protection (measure developed by the authors). The correlation between the SAS and antigay prejudice was not significant. However, the distribution of this measure was heavily skewed with the vast majority of the sample reporting little or no antigay prejudice, so there was little variance. See Table 4 for additional details.

Some group differences emerged. In both samples, males had lower SAS scores than females: for undergraduates, $t(370) = –5.16$, $p < .01$; for community, $t(185) = –3.19$, $p < .01$. Participants not currently practicing a religion had significantly lower SAS scores than those currently practicing a religion, $t(164) = 2.23$, $p < .05$. SAS scores did not differ according to sexual orientation.

Two additional studies support the construct validity of the SAS. Nelson and Purdon (2011) replicated the finding that greater erotophobia, as measured by the SAS, is associated with experiencing more sexual problems. Rye, Serafini, and Bramberger (2015) used a slightly modified version of the SAS and found that greater erotophilia was associated with more positive feelings about BDSM in a sample of undergraduate women.

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Exhibit

Sexual Anxiety Scale

For each item presented below, you are asked to rate how much discomfort you would experience using the following scale:
How much discomfort would you feel in each situation? (Place this rating under column "D")

0	10	20	30	40	50	60	70	80	90	100
Extremely Pleasurable					Neutral					Extremely Discomforting

D

1. Wearing clothes that show off my sexually attractive features ___
2. Seeing two people kissing or fondling each other ___

3. Watching a movie scene from a major box office movie in which people were naked ___
4. Talking with my friends about my sex life ___
5. Masturbating ___
6. Looking at hardcore or pornographic photos in a magazine (explicit scenes of the genitals and penetration) ___
7. Using sex toys, such as a vibrator, during sex with my partner ___
8. Exploring the erogenous, or sexually exciting, parts of my partner's body ___
9. Hearing about someone engaging in a consensual sexual act that I personally would never want to engage in ___
10. Discussing my sexual fantasies with my partner ___
11. Having arousing sexual thoughts that are unrelated to my current sexual partner ___
12. Hearing about a woman who enjoyed sex and was sexually adventurous ___
13. Watching a "hardcore" or "pornographic" film ___
14. Being exposed to information about sexually transmitted infections ___
15. Kissing or fondling my partner in a public place ___
16. Vocalizing my pleasure during sex with my partner ___
17. Watching a movie scene from a major box office movie in which people were kissing or fondling each other ___
18. Hearing about someone who has a biological sexual abnormality, such as undescended testicles, or a fertility problem ___
19. Reading books with sexually explicit passages ___
20. Agreeing to try sexual activities or positions that I find unusual but my partner suggests ___
21. Using sex toys, such as a vibrator, when I am alone ___
22. Engaging in foreplay with my partner ___
23. Finding myself becoming sexually aroused in response to something I never would have expected myself to be aroused by ___
24. Visiting Internet sites that feature erotic or softcore photos or video clips ___
25. Having arousing sexual thoughts that are related to my current sexual partner ___
26. Talking with my partner about his/her sexual fantasies ___
27. Talking with my friends about general matters of a sexual nature, such as menstruation, pregnancy, childbirth ___
28. Changing my clothes in a public change room that does not have privacy cubicles ___
29. Being exposed to information about contraceptive devices that require intimate genital contact (e.g., diaphragm, sponge, foam) ___
30. Overhearing other people (not parents) having sex ___
31. Watching a scene from a major box office movie in which people were engaging in sex ___
32. Exploring erogenous, or sexually exciting, parts of my body when I am alone ___
33. Someone knowing that I look at/watch erotic photos/films ___
34. Suggesting new sexual activities or positions to my partner ___
35. Visiting Internet sites that features hardcore or pornographic photos or video clips ___
36. Engaging in a casual sexual encounter (e.g., a one-night stand) ___
37. Being invited by an acquaintance/friend/partner to engage in an unusual sexual act ___
38. Hearing about sexual issues or matters from the newspaper or TV ___
39. Fantasizing about arousing sexual acts during sex with my partner in order to enhance my sexual excitement ___
40. Disclosing to my friends that I have a sexual problem ___
41. Answering questions about sexual matters such as conception ___
42. Someone overhearing me and my partner having sex ___
43. Being around others who are changing their clothes ___
44. Being exposed to information about diseases of the sex organs, such as cervical cancer, testicular cancer, prostate cancer, breast cancer ___
45. Watching an "erotic" or "softporn" film (no explicit scenes of the genitals or penetration) ___
46. Allowing my partner to explore my erogenous, or sexually exciting, parts of my body ___
47. Someone knowing that I look at/watch pornographic photos/films ___
48. Changing activities or positions during sex with a partner to help ensure that I have an orgasm ___
49. Looking at erotic or softcore photos in a magazine ___
50. Telling my partner what pleases me and does not please me sexually ___
51. Hearing about people I don't consider to be sexual engaging in sex, such as the elderly, my parents, disabled people ___
52. Having a conversation with my friends about their sex lives ___
53. Fantasizing about arousing sexual thoughts during masturbation in order to enhance my sexual excitement ___
54. Watching coverage of the Gay Pride Day parade ___
55. Being exposed to information about contraceptives and contraceptive use ___
56. Completing questionnaires about my sexuality ___

Sexual Opinion Survey

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Erotophobia–erotophilia is a construct representing individual differences in learned affective and evaluative responses to sexual cues spanning a negative (erotophobia) to positive (erotophilia) continuum. The 21-item Sexual Opinion Survey (SOS; Fisher, Byrne, White, & Kelley, 1988) operationalizes the measurement of erotophobia–erotophilia.

Development

Fisher et al. (1988) selected 21 from 53 theoretical items based on convergent and discriminant validity assessments of affective reactions to erotic slides, relations with personality dimensions (e.g., authoritarianism), and sexual behavior (e.g., contraceptive use). Construct validity was established in research concerning antecedent (e.g., sexual socialization experiences) and consequent (e.g., avoidance or approach responses to contraception, sexual education, sexual communication, sexual activity during pregnancy and postpartum) relationships. Research in multiple settings (i.e., North American students and couples; students from India, Israel, and Hong Kong) provided further construct validation evidence. Exploratory factor analysis indicated three subscales (Open Sexual Display, Sexual Variety, and Homoeroticism) although most research uses an aggregate score. Minor wording substitutions have been introduced in accord with current usage. Specifically, the terms "pornography" and "pornographic" from the original scale have been replaced with "erotic" or "sexually explicit material" and "stripper" has been replaced with "exotic dancer."

Response Mode and Timing

Participants respond using a 7-point Likert-type scale: 1 (*strongly disagree*), 2 (*moderately disagree*), 3 (*slightly disagree*), 4 (*in between*), 5 (*slightly agree*), 6 (*moderately agree*), and 7 (*strongly agree*). Completion typically takes less than 10 minutes. Compared to computer completion, paper-and-pencil versions of the SOS resulted in higher erotophilia scores (McCallum & Peterson, 2015).

Scoring

While scoring methods will not affect relationships with other variables, there have been a number of ways researchers have scored the SOS. Most researchers reverse-code negatively phrased items and then sum items, producing an erotophobic-to-erotophilic range of 21–147. Another way to score the measure is to reverse-code negative items and then average the items to produce an erotophobia–erotophilia score ranging from 1–7. Using an average of items is a useful way to deal with small amounts of missing data (e.g., a score for a participant completing 19 items can be produced easily).

Fisher (1998) specified the original scoring scheme as follows: First, score responses from 1 (*I strongly disagree*) to 7 (*I strongly agree*). Second, add scores from Items 2, 5, 6, 12, 13, 14, 15, 16, 19, and 20. Third, subtract from this total the sum of Items 1, 3, 4, 7, 8, 9, 10, 11, 17, 18, and 21. Fourth, add 67 to this quantity. Scores range from 0 (*most erotophobic*) to 126 (*most erotophilic*).

Fisher (1998) describes a short form of the SOS, using Items 12, 4, 13, 17, and 21 (in this order, renumbered 1–5). This scale has yet not been validated. Also, subscales were created through a principle component analysis by Gilbert and Gamache (1984). These subscales have not been validated in any other sample. The subscales are: the *Open Sexual Display* factor consisting of Items 1, 2, 3, 7, 9, 12, 13, 15, 20, and 21; the *Sexual Variety* factor consisting of Items 4, 6, 8, 9, 17, 18, and 19; and the *Homoeroticism* factor consisting of Items 5, 10, 11, and 16.

Reliability

Based on a dataset collected by Rye, Serafini, and Bramberger (2015), the SOS demonstrated good internal consistency (α_{total} = .89, N_{total} = 2,086; α_{men} = .87, n_{men} = 715; α_{women} = .90, n_{women} = 1,371). Approximately 6 weeks later, 145 women completed the SOS again (α = .90); test–retest correlation was r = .77. Others have found high reliability coefficients (e.g., .89; Bloom, Gutierrez, & Lambie, 2015) and strong correlations of couple members' erotophobia–erotophilia (Fisher et al., 1988).

Validity

The construct validity of erotophobia–erotophilia is well-established in research with theoretically relevant variables (cf. Fisher, 1998; Rye, Meaney, & Fisher, 2011). The SOS measure of erotophobia–erotophilia correlates with sexual

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TABLE 1
Correlations between the SOS and Personality and Attitudinal Variables

	SOS *r*		
	Total[a]	Women[b]	Men[c]
Religious fundamentalism	.53	.57	.47
Right-wing authoritarianism	.57	.54	.68
Benevolent sexism	–.50	–.54	–.44
Hostile sexism	–.33	–.37	–.33
Attitudes toward women	.42	.42	.58
Attitudes toward abortion	.47	.46	.50
Attitudes toward lesbians and gay men	.61	.60	.71
Social desirability	–.12[ns]	–.04[ns]	–.37

Note. Data published in Rye, Merritt, & Straatsma (in press). All *r*s significant at the $p < .05$ level unless noted.
[a]$n = 209–217$. [b]$n = 156–160$. [c]$n = 54–56$.

consciousness and assertiveness (Bay-Cheng & Fava, 2011); sexual excitation and inhibition (e.g., Birnbaum, Mikulincer, Szepsenwol, Shaver, & Mizrahi, 2014; Bloemendaal & Laan, 2015); and self-reported sexual behavior (e.g., cunnilingus initiation: Bay-Cheng & Fava, 2011; online sex: Byers & Shaughnessy, 2015; and some measures of childhood abuse: Kelley & Gidycz, 2015). Supporting the stability of erotophobia–erotophilia, Fisher (2009) found that—unlike a measure of sociosexuality—the SOS did not change as a function of manipulated sexual norms (also see Rye et al., 2015; where the SOS did not vary as a function of a persuasive positive or negative communication about BDSM).

The SOS correlates with religious fundamentalism, right-wing authoritarianism, ambivalent sexism, and attitudes toward women, abortion, and lesbians and gay men (Table 1).

Providing convergent validity, the SOS has demonstrated strong relationships with Fallis, Gordon, and Purdon's (2011) Sexual Anxiety Scale (*r*s = .72 to .82) and with a seven-item alternative measure of erotophobia–erotophilia (*r*s = .71 to .77; Rye, Meaney, Yessis, & McKay, 2012). Finally, a Sexual Liberalism Scale, addressing non-SOS topics (e.g., sex toy use), and the SOS correlated at $r = .66$ (Rye et al., 2015) and $r = .79$ (Swami, Weis, Barron, & Furnham, 2017). In a multiple regression analysis, the SOS emerged as the only significant erotophobia–erotophilia instrument predictive of BDSM attitudes (Rye et al., 2015).

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Exhibit

Sexual Opinion Survey

Please respond to each item as honestly as you can. There are no right and wrong answers, and your answers will be completely anonymous.

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 In Between	5 Slightly Agree	6 Moderately Agree	7 Strongly Agree
1. I think it would be very entertaining to look at hard-core erotica.	○	○	○	○	○	○	○
2. Erotica is obviously filthy and people should not try to describe it as anything else.	○	○	○	○	○	○	○
3. Swimming in the nude with a member of the opposite sex would be an exciting experience.	○	○	○	○	○	○	○
4. Masturbation can be an exciting experience.	○	○	○	○	○	○	○
5. If I found that a close friend of mine was a homosexual, it would annoy me.	○	○	○	○	○	○	○
6. If people thought I was interested in oral sex, I would be embarrassed.	○	○	○	○	○	○	○
7. Engaging in group sex is an entertaining idea.	○	○	○	○	○	○	○
8. I personally find that thinking about engaging in sexual intercourse is arousing	○	○	○	○	○	○	○
9. Seeing an erotic movie would be sexually arousing to me.	○	○	○	○	○	○	○
10. Thoughts that I may have homosexual tendencies would not worry me at all.	○	○	○	○	○	○	○
11. The idea of my being physically attracted to members of the same sex is not depressing.	○	○	○	○	○	○	○
12. Almost all sexually explicit material is nauseating.	○	○	○	○	○	○	○
13. It would be emotionally upsetting to me to see someone exposing themselves publicly.	○	○	○	○	○	○	○
14. Watching an exotic dancer of the opposite sex would not be very exciting.	○	○	○	○	○	○	○
15. I would not enjoy seeing an erotic movie.	○	○	○	○	○	○	○
16. When I think about seeing pictures showing someone of the same sex as myself masturbating, it nauseates me.	○	○	○	○	○	○	○
17. The thought of engaging in unusual sex practices is highly arousing.	○	○	○	○	○	○	○
18. Manipulating my genitals would probably be an arousing experience.	○	○	○	○	○	○	○
19. I do not enjoy daydreaming about sexual matters.	○	○	○	○	○	○	○
20. I am not curious about explicit erotica.	○	○	○	○	○	○	○
21. The thought of having long-term sexual relations with more than one sex partner is not disgusting to me.	○	○	○	○	○	○	○

Comfort with Sexual Matters for Young Adolescents

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Erotophobia–erotophilia is a hypothetical personality construct representing a positive-to-negative evaluative response to sexual material. The Sexual Opinion Survey (SOS; Fisher, White, Byrne, & Kelley, 1988) was developed to measure erotophobia–erotophilia and it remains an excellent manifest measure of this construct (Rye & Fisher, 2019; Rye, Meaney, & Fisher, 2011; Rye, Serafini, & Bramberger, 2015). However, the SOS includes age-inappropriate language and is too long to be used with young adolescents. The 6-item Comfort with Sexual Matters for Young Adolescents scale (CWSMYA; Rye, Meaney, Yessis, & McKay, 2012) was designed to measure erotophobia–erotophilia in youth samples and be comparable to the SOS.

Development

Six items were generated based on a theoretical understanding of erotophobia–erotophilia and adolescent sexuality (Brunk et al., 2008; Rye et al., 2008). A psychometric analysis was conducted after initial use with adolescent girls and teenaged university students (Rye et al., 2012).

Response Mode and Timing

The scale takes approximately 5 minutes to complete. Past research has used both paper-and-pencil as well as computer-based delivery modes.

Scoring

All responses are recorded on a 7-point Likert-type scale ranging from 1 (*I strongly disagree*) to 7 (*I strongly agree*). Items 1, 4, and 6 are reverse-coded so that higher scores indicate greater erotophilia (greater comfort with sexual matters). Then, an aggregated score may be calculated; this can take the form of a sum (range 6–42) or an average (range 1–7). Method of scoring will not affect relationships with other variables.

Reliability

In a large sample of young girls (average age = 12.5 years), internal consistency was weak-to-moderate for the CWSMYA (α = .62–.70). Two samples of university students indicated good internal consistency (α = .85; Rye et al., 2012; and α =.80; data set used in Rye et al., 2015). Test–retest correlations for the young girl sample (N = 432–473) ranged from .50 to .63 across four time points (Rye et al., 2012). Across an approximate six-week time frame, the test–retest correlation was .83 for 138 university women (data used in Rye et al., 2015; Item 3 was split into two items in this study).

Validity

In terms of convergent validity, the CWSMYA correlated .74 with the SOS for the sample of 55 university students (Rye et al, 2012) and .76 for 2,486 university students (.77 for males, .75 for females; Rye et al., 2015). A subsample of 146 women from this latter sample completed the measures a second time approximately six weeks later and the CWSMYA correlated with the SOS .71.

Fallis, Gordon, and Purdon (2011) developed a Sexual Anxiety scale to measure erotophobia–erotophilia. The CWSMYA correlated .67 with this scale for 2499 university students (.62 for males, .68 for females, Fisher's $z = -2.43$, $p < .05$; Rye et al., 2015; the CWSMYA correlated significantly more strongly with the Sexual Anxiety Scale for women compared to men). Six weeks later, the CWSMYA correlated .68 with the Sexual Anxiety scale for a subsample ($n_{\text{females}} = 146$). The CWSMYA correlated .47 ($n_{\text{females}} = 146$) with a Sexual Liberalism scale that addresses topics not covered in the SOS or the Sexual Anxiety scale (e.g., sex toy use, voyeurism, cybersex; Rye et al., 2015).

In terms of concurrent validity, for the sample of young girls, the CWSMYA correlated weakly to moderately (i.e., rs = .20–.30) with sexuality variables such as behavioral intentions, attitudes, perceived costs and benefits of intercourse, actual sexual behavior, parental communication regarding sexuality, and sexual beliefs. It correlated weakly with social desirability ($r = -.19$). Correlations with non-sexual variables were even weaker (i.e., self-esteem and sense of school membership; see Rye et al., 2012).

There were no gender differences in the CWSMYA for the university student sample reported in Rye et al. (2012). However, there were gender differences CWSMYA scores for the large university student sample used in Rye et al. (2015; $\bar{x}_{\text{men}} = 5.26$, SD = 1.27, n = 832 versus $\bar{x}_{\text{women}} = 5.01, SD = 1.39, n = 1742, t(1779) = 4.55, p < .0001$ with unequal variance) such that men were significantly more erotophilic than women but this effect was very small (Cohen's $d = .19$). For university men and women, scores on the CWSMYA were slightly erotophilic, on average.

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Exhibit

Comfort with Sexual Matters for Young Adolescents

Please respond to each item as honestly as you can. There are no right and wrong answers, and your answers will be completely anonymous.

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 In Between	5 Slightly Agree	6 Moderately Agree	7 Strongly Agree
1. It is not OK for a person to have more than one sex partner during their lifetime.	○	○	○	○	○	○	○
2. It is OK for a person to masturbate if it makes him/her feel good.	○	○	○	○	○	○	○
3. It is OK for two men to have sex with each other or two women to have sex with each other.	○	○	○	○	○	○	○
4. It is not OK for people to have sexual intercourse unless they are in a committed relationship.	○	○	○	○	○	○	○
5. It is OK to enjoy being sexually aroused (turned on) by a sexy story, picture, or movie.	○	○	○	○	○	○	○
6. Oral sex is disgusting to me.	○	○	○	○	○	○	○

Sexual Liberalism Scale

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The Sexual Liberalism Scale (SLS) was designed by Rye, Serafini, and Bramberger (2015) as a measure of erotophobia–erotophilia. Erotophobia–erotophilia is a theoretical dimension of personality representing learned and affective reactions to sexuality. The SLS assesses comfort with sexuality covering more current sexual

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constructs, such as internet sexuality and sex toy use, than those in the original Sexual Opinion Survey (SOS; Fisher, Byrne, White, & Kelley, 1988; see Rye & Fisher, 2019).

Development

The SLS was included with other erotophobia–erotophilia measures in a study of university women's sexual attitudes (Rye et al., 2015). Items were specifically created so as not to overlap with the SOS or the Sexual Anxiety Scale (Fallis, Gordon, & Purdon, 2011). The SLS is intended to be used as an alternative or supplement to the SOS.

The SLS was intended to be a unidimensional scale. However, Swami, Weis, Barron, and Furnham (2017) conducted an Exploratory Factor Analysis and constrained it to two highly interrelated factors: general sexual liberalism (19 items) and technology liberalism (7 items). Swami et al. (2017) slightly changed item 25 (to "I would enjoy giving oral sex" from "I would dislike giving oral sex"). Also, item 20 was slightly different ("I would use a vibrator" versus "I would like to use a vibrator"). Confirmatory Factor Analysis of this structure with two similar internet samples did not support this two-factor model. Currently, there is not consistent statistical or theoretical support for a multi-factor SLS. Additional model analyses are underway.

Response Mode and Timing

Participants respond to 29 statements on a 7-point Likert-type *strongly disagree* to *strongly agree* scale. Completion takes approximately 15 minutes.

Scoring

Eleven items are negatively phrased and are reverse coded (i.e., 1, 4, 8, 11, 12, 15, 21, 23, 25, 26, and 28); items completed are then averaged to produce a conservatism/liberalism score ranging from 1 to 7 where higher scores represent greater sexual liberalism/erotophilia.

Reliability

Cronbach's alpha coefficients ranged from .81 to .90 across samples (see Table 1). Due to an error, one item was duplicated. Initially, this item (item 1 and item 29: ". . .casual sex . . . would not be enjoyable for me") was meant to be positively as well as negatively worded. The error is fortuitous, in that, it provides reliability information; given identical content, the correlation should be 1.00. The correlations between the two items were .73, .71, and .83 for three samples. There were no gender differences in these correlations.

Swami et al. (2017) coded one of these items positively and, while they did not report the correlation between these two items, the factor loadings of the positive and negatively worded items were similar. In the current exhibit, we have the first item negatively phrased and the last item is positively phrased.

Validity

Table 1 presents descriptive statistics for the SLS. It was normally distributed and gender differences were evident such that men were significantly more sexually liberal (i.e., erotophilic) than women, Sample 1, $t(220) = 5.24$, $p < .001$, $\eta_p^2 = .11$; Sample 2, $t(355) = 5.66$, $p < .001$, $\eta_p^2 = .08$. Gender differences were also significant in Swami et al.'s analysis, $t(312) = 8.25$, $p < .001$, $d = .93$. This is consistent with past SOS research whereby men were more erotophilic than women in some samples (e.g., Rye et al., 2011).

In terms of construct validity, the SLS correlates highly with measures of erotophobia–erotophilia, especially the

TABLE 1
Descriptive Statistics for the Sexual Liberalism Scale across Three Samples

Sample	Mean	Median	Standard Deviation	α
Sample 1[a] University Students	3.69	3.72	0.87	.87
Female[b]	3.47	3.37	0.86	.87
Male[c]	4.05	4.06	0.76	.86
Sample 2[d] MTurk (no demographics)	4.27	4.20	0.93	.90
Sample 3[e] MTurk	4.24	4.24	0.98	.91
Female[f]	3.92	3.97	0.99	.92
Male[g]	4.49	4.41	0.90	.90
Swami et al. (2017) MTurk sample (General Liberalism shortened, 19 items)	—	—	—	—
Female[h]	3.41	—	1.03	.89
Male[i]	4.37	—	1.03	.87

[a]$N = 225$. [b]$n = 135$. [c]$n = 90$. [d]$N = 173$. [e]$N = 362$. [f]$n = 158$. [g]$n = 199$. [h]$n = 151$. [i]$n = 164$. MTurk = Amazon's Mechanical Turk.

TABLE 2
Correlations of Sexual Liberalism Scale with Validation Instruments

	Erotophobia–erotophilia measures			BDSM measures			
	Sexual Opinion Survey (Fisher et al., 1988)	Sexual Anxiety Scale (Fallis et al., 2011)	Comfort with Sexual Matters for Young Adolescents (Rye et al., 2012)	Attitudes toward BDSM (Yost, 2010)	Interest in BDSM (Yost, 2010)	Knowledge of BDSM (Yost, 2010)	Ratings of feelings about BDSM (Rye et al., 2015)
Sample 1[a] University Students	.83***	.75***	.60***	—	—	—	.62***
Female[b]	.84***	.78***	.62***	—	—	—	.66***
Male[c]	.73***	.61***	.44***	.24*	.49***	.42***	.41***
Sample 2[d] MTurk (no demographics)	.79***	—	—	.54***	.53***	—	.59***
Sample 3[e] MTurk	.83***	—	—	.59***	.64***	.34***	.70***
Female[f]	.86***	—	—	.63***	.67***	.37***	.73***
Male[g]	.80***	—	—	.58***	.61***	.31***	.70***

[a]N=225. [b]n=135. [c]n=90. [d]N=173. [e]N=362. [f]n=158. [g]n=199.
*$p < .05$. ***$p < .001$.

SOS (rs = .73 to .86), but also with the Sexual Anxiety Scale (r = .75) and the Comfort with Sexual Matters for Young Adolescents (r = .61). In terms of convergent validity, the SLS was correlated with a number of BDSM-related attitude measures (ranging from .24 to .70; see Table 2). Swami et al. (2017) found their 19-item SLS correlated significantly and strongly with the SOS (rs = .55 to .79), attitudes toward unconventional sex (rs = .45 to .67), and personal body appreciation and pride (rs = .26 to .28). See Table 2.

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Exhibit

Sexual Liberalism Scale

Please read the following statements and choose the number that best corresponds with your agreement/disagreement with the item (response scale accompanies each item).

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 In Between	5 Slightly Agree	6 Moderately Agree	7 Strongly Agree
1. "Picking someone up" and having casual sex with them would not be enjoyable for me.	○	○	○	○	○	○	○
2. I like the idea of meeting someone on vacation and having casual sex with them.	○	○	○	○	○	○	○

3. Hiring a sex worker (i.e., prostitute) while on a business trip or vacation is exciting to me.	○	○	○	○	○	○	○
4. Cyber-sex (engaging in sexual activities with someone via the internet in a chat room or chatting program) is a form of perversion to me.	○	○	○	○	○	○	○
5. I would pay to have cyber-sex with someone on the internet.	○	○	○	○	○	○	○
6. Using a webcam with someone in a sexy way is fun.	○	○	○	○	○	○	○
7. "Dirty talk" (such as, "you make me so wet") is sexually exciting to me.	○	○	○	○	○	○	○
8. Terms such as "eating out" or "blow job" disgust me.	○	○	○	○	○	○	○
9. If a sexual partner asked me to urinate on them or if they could urinate on me, I would find this arousing.	○	○	○	○	○	○	○
10. The idea that object(s) such as leather, shoes, feet, etc. could be sexually enjoyed interests me.	○	○	○	○	○	○	○
11. The idea that an object (e.g., shoes) could arouse me makes me feel very uncomfortable.	○	○	○	○	○	○	○
12. I would suppress my urge to be sexual with a non-human object (e.g., leather clothing).	○	○	○	○	○	○	○
13. The idea of hiring a sex worker (i.e., prostitute) is arousing to me.	○	○	○	○	○	○	○
14. The idea of engaging sexually with someone who is also a sex worker (i.e., prostitute) is arousing to me.	○	○	○	○	○	○	○
15. I would be disgusted if I saw two people having sex on their balcony.	○	○	○	○	○	○	○
16. The idea of having sex in a public place (e.g., the beach) is arousing to me.	○	○	○	○	○	○	○
17. If I knew others were watching me have sex, I would become excited.	○	○	○	○	○	○	○
18. I would be interested in using a dildo (a sex toy shaped like a penis) during a sexual encounter with someone.	○	○	○	○	○	○	○
19. The thought of using a "vibrator" (a vibrating mechanical device) with my partner is exciting to me.	○	○	○	○	○	○	○
20. I would like to use a "vibrator" (a vibrating mechanical device) while masturbating.	○	○	○	○	○	○	○
21. I would be offended if my partner asked to use a "vibrator" (a vibrating mechanical devise) on me during sex.	○	○	○	○	○	○	○
22. The thought of having a "threesome" (sex with two other people) interests me.	○	○	○	○	○	○	○
23. The thought of having an orgy is terrifying to me.	○	○	○	○	○	○	○
24. I would enjoy receiving oral sex (i.e., mouth-to-genital stimulation).	○	○	○	○	○	○	○
25. I would dislike giving oral sex (i.e., mouth-to-genital stimulation).	○	○	○	○	○	○	○
26. The thought of a pregnant woman having sex is disturbing.	○	○	○	○	○	○	○
27. Wearing "sexy" underwear makes me feel aroused.	○	○	○	○	○	○	○
28. Seeing a partner in a "sexy" outfit does not interest me.	○	○	○	○	○	○	○
29. "Picking someone up" and having casual sex with them would be enjoyable for me.	○	○	○	○	○	○	○

Multidimensional Measure of Comfort with Sexuality

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One of the goals of sexuality educators has been to increase student comfort with sexuality, including comfort talking about sexual issues. This entry reports on a multidimensional measure of comfort with sexuality—the Multidimensional Measure of Comfort with Sexuality (MMCS1)—and a nine-item short form, the MMCS1- S, which correlates well with the total score from the MMCS1.

The MMCS1 is a multidimensional measure of comfort with sexuality that can be easily administered in college-level sexuality classrooms. Note that comfort with sexuality is not the same as acceptance of sexuality as a positive thing. For example, a person might be comfortable talking about a sexual behavior they believe people should not do; the MMCS1 measures comfort, not necessarily acceptance.

Development

Although scale development work typically proceeds with a single ordering of items (thereby embedding each item in a specific context), in the "real" world, scales are often misused; researchers often extract and administer only those items that constitute a particular subscale. This practice pulls the items out of the context in which they were validated, raising questions about the validity of the subscale using the new format. The MMCS1 was developed using data from three semirandom orderings of the items—only items that were relatively position/context independent were retained—allowing more confidence to be placed in the use of a single subscale.

The MMCS1 was developed using a convenience sample of 463 college students, most of whom were recruited from sexuality education classrooms. The MMCS1 was developed as part of my doctoral work. See my doctoral dissertation for full details on the development of the instrument (Tromovitch, 2000).

The *Comfort Discussing Sexuality* subscale is designated as the TS subscale (Talking, Sexuality). The TS subscale contains 11 items. Most were designed to tap comfort talking about sexuality of a personal nature, and a few were designed to tap comfort talking about sexuality of a nonpersonal nature (contrary to my expectations, statistical analyses did not support a psychometrically meaningful distinction between personal and nonpersonal discussions of sexual topics).

The *Comfort With One's Own Sexual Life* subscale is designated as the AP subscale (Activities, Personal). The AP subscale contains 8 items, all of which were designed to tap comfort with one's own sexual activities.

The *Comfort With the Sexual Activities of Others* subscale is designated as the AO subscale (Activities, Others). This subscale contains nine items, all of which were designed to tap comfort interacting with people who engage in various sexual activities.

The *Comfort With the Taboo Sexual Activities of Others* subscale is designated as the AT subscale (Activities, Taboo). This subscale contains four items, all of which were designed to tap comfort interacting with people who engage in a variety of sexual activities. They are distinguished from those constituting the AO subscale in that they all deal with taboo sexual activities (e.g., sibling incest, youth–adult sex, bestiality).

A 9-item short form, the MMCS1-S, was also created so as to have a high correlation with the total score from the MMCS1 ($r = .93$) and good internal consistency ($\alpha = .80$).

The instruments were derived for use in college-level sexuality education classrooms but may have applicability with other populations.

Response Mode and Timing

The full, 32-item MMCS1 takes approximately 10 minutes to complete. Respondents indicate the degree to which they agree or disagree with the 32 statements by checking one of six non-numbered boxes with the anchors (1) *Strongly Disagree* and (6) *Strongly Agree*. Data from the MMCS1 produces four subscales.

Scoring

Subscale scores are calculated as the arithmetic mean of the individual responses for the appropriate items, after adjusting for reverse valence items. This approach keeps all subscales on the same measurement scale (1 to 6) and allows for an easy way to deal with missing data (i.e., if an item is left blank, it does not enter into the calculation). A single blank item is not expected to meaningfully reduce the validity of the scores; however, if multiple items are left blank, scores should be interpreted with caution.

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TABLE 1
Information on the MMCS1 Subscales

Subscale	Subscale Intercorrelations			Cronbach's α	Items Constituting Subscales
	AP	*AO*	*AT*		
Talking, Sexuality (TS)	.38	.46	.08	.89	2, 4, 5*, 7, 8, 13, 15, 19, 24, 27, 31
Activities, Personal (AP)		.23	–.01	.84	3, 9, 10, 12*, 14, 16*, 21, 29
Activities, Others (AO)			.19	.83	1, 11*, 17, 23, 25, 26, 28*, 30, 32
Activities, Taboo (AT)				.62	6, 18, 20*, 22*

Note. Items marked with an asterisk (*) are reverse scored. An α greater than .9 may indicate the presence of bloated specifics, which raise α without improving a scale's usefulness; an α less than .6 indicates low reliability.

By summing the TS, AP, and AO subscales, a Comfort With Sexuality total score is formed (thus having a range of 3 to 18). It must be remembered that this total score is not necessarily related to comfort with the taboo sexual activities of others (statistical analyses indicated that a total score is warranted yet is relatively independent of the construct measured by the AT subscale).

For normal valence items, *Strongly Disagree* is scored as 1, with scores increasing to *Strongly Agree*, which is scored as 6—higher scores indicating greater comfort. See Table 1 for item numbers and the subscale to which they belong; items with an asterisk are reverse scored.

The MMCS1-S is scored by averaging the responses to its 9 items; it does not contain reverse valence items.

Reliability

Cronbach's alpha indicated excellent reliability for the TS, AP, and AO subscales and low but acceptable reliability for the AT subscale (see Table 1).

Item-total correlation analyses were also performed. All 32 MMCS1 items were found to have item-total correlations in the commonly recommended ranges (.2 or .3 through .8).

Validity

To ensure face and content validity, an initial pool of items was reviewed by an expert panel including expertise in both sexuality education and psychometric scale development. The panel included one MD, one psychology PhD, and two sexuality educators. Only 60 of the items passing the first expert panel were considered for use.

To ensure construct validity, over 400 factor analyses were calculated. Factor analytic methods included principal components analysis, common factor analysis, and image analysis. Types of rotation employed included varimax, equamax, and promax (with $k = 2$ and $k = 3$). In addition to analyzing the entire derivation dataset as a whole, various subgroups were separately examined including, but not limited to, males, females, respondents aged 18–20, respondents aged 21–23, White/Caucasian respondents, and data from each of the three different semirandom ordered forms of the derivation instrument. The 32 items retained in the MMCS1 possess a clear factor structure evidencing great reproducibility across factor analytic method, type of rotation, and subsample.

As a further check on face and content validity, a second expert panel reviewed the 34 best items (based on numerous statistical analyses, at both the factor level and the individual item level (e.g., kurtosis, means, and standard deviations of responses to each item). The second expert panel consisted of this author and two others, both of whom have PhDs in sexuality.

The four factors that were used to define the subscales accounted for over 40 percent of the variance in the 32 items. This large value suggests the four subscales significantly explain response variance in items dealing with comfort with sexuality, further supporting construct validity.

As a final test of construct validity, a confirmatory analysis was conducted (oblique principal components cluster analysis), which also indicated high construct validity.

Image analysis indicated that the TS, AO, and AP subscales shared common variance, supporting their use (and excluding the AT subscale) in calculating a comfort with sexuality total score. The intercorrelations among the subscales are provided in Table 1.

Other Information

In the derivation sample, males and females did not significantly differ in most of their comfort levels; people who masturbate more than one time per month were more comfortable discussing sexuality and with the sexuality of others than people who rarely masturbate or who declined to indicate their masturbation frequency; people who described themselves as liberal were more comfortable with sexuality; people whose family of origin was open about sexual issues and nudity were more comfortable

discussing sexuality and with their own sexual lives; and people reporting higher frequencies of religious attendance or importance showed significantly less comfort with the sexuality of others.

Because of the small number of items on the AT subscale, its lower reliability, and the fact that what constitutes taboo activity varies greatly from one population to another, the AT subscale should be interpreted carefully; further, owing to widely varying and constantly changing definitions of *taboo*, when feasible the AT subscale should be tested for internal consistency.

Note that, as with most measures containing subscales, the scoring of the MMCS1 produces raw scores, not standardized scores. Consequently, scores cannot be precisely compared across subscales (e.g., if a respondent has an AP subscale score of 3.2 and a TS subscale score of 3.4, one cannot conclude that the respondent is more comfortable talking about sexuality than the respondent is with his or her own sexual life).

Reference

Tromovitch, P. (2000). The Multidimensional Measure of Comfort with Sexuality (MMCS1): The development of a multidimensional objective measure of comfort with sexuality for use in sexuality education and research. *Dissertation Abstracts International*, *61*, 2277.

Exhibit

Multidimensional Measure of Comfort with Sexuality

For each item please select the response that best represents your answer.

	1 Strongly Disagree	2	3	4	5	6 Strongly Agree
1. I am completely comfortable knowing and interacting with people whose sexual activities significantly differ from my own.	○	○	○	○	○	○
2. I would be completely comfortable talking to a friend about sexual problems I was having with my lover.	○	○	○	○	○	○
3. I have lived my sex life in a way that is consistent with my moral beliefs.	○	○	○	○	○	○
4. I would be comfortable telling a good friend about sexual experiences I have had which I consider to be out of the norm.	○	○	○	○	○	○
5. Talking about the details of my own sexual experiences would be embarrassing, even with friends.	○	○	○	○	○	○
6. I could be comfortable interacting with a person who I thought might be having a sexual relationship with their sibling.	○	○	○	○	○	○
7. Talking about my personal sexual views is as natural as talking about current events.	○	○	○	○	○	○
8. I enjoy the opportunity to share my personal views about sexuality.	○	○	○	○	○	○
9. My sexual experiences and explorations are a positive, on-going part of who I am.	○	○	○	○	○	○
10. I am comfortable with my sexual activities, both past and present.	○	○	○	○	○	○
11. Having a lot of sexually active bisexual friends would make me feel uncomfortable.	○	○	○	○	○	○
12. I am ashamed of my past sexual conduct.	○	○	○	○	○	○
13. I am comfortable talking about my sexual views, my sexual fantasies, and sexual experiences that I have had.	○	○	○	○	○	○
14. My past sexual experiences and explorations have been very worthwhile.	○	○	○	○	○	○
15. I would be comfortable talking about my sexual fantasies in a small group.	○	○	○	○	○	○
16. It is disturbing for me to think about my past sexual experiences.	○	○	○	○	○	○
17. I would be comfortable having a close friend who was engaging in homosexual activities.	○	○	○	○	○	○
18. I could comfortably interact with an adult who I thought might have had a sexual encounter with a pubescent 12-year-old.	○	○	○	○	○	○

19. I am comfortable talking about my sexual views with people I do not know well.	○	○	○	○	○	○
20. I would never maintain a friendship with someone who engaged in sexual activity with animals.	○	○	○	○	○	○
21. The sexual activities I have engaged in are completely and perfectly natural.	○	○	○	○	○	○
22. I would be repulsed and appalled if a 21-year-old friend told me they recently had oral sex with a 13-year-old.	○	○	○	○	○	○
23. It would not bother me if I knew that a good friend enjoys anal stimulation during masturbation.	○	○	○	○	○	○
24. I am comfortable discussing my sexual fantasies with close friends.	○	○	○	○	○	○
25. I would be perfectly comfortable working with a person who I knew enjoys spanking during sexual activity with their sex partner.	○	○	○	○	○	○
26. A person can be a good friend of mine, even if they enjoy sadomasochism with their sex partners.	○	○	○	○	○	○
27. I can freely discuss sexual topics in a small group of peers.	○	○	○	○	○	○
28. I would find it awkward knowing that a friend's favorite sexual activity was anal sex.	○	○	○	○	○	○
29. If I had my life to live over, I would relive most of my past sexual experiences.	○	○	○	○	○	○
30. I think it is good for people to experiment with a wide range of sexual practices.	○	○	○	○	○	○
31. Talking to a sexuality researcher about my sexual history would be easy for me.	○	○	○	○	○	○
32. I would continue to accept a 21-year-old friend who I discovered was sexually involved with an elderly person.	○	○	○	○	○	○

Multidimensional Measure of Comfort with Sexuality - Short Form

For each item please select the response that best represents your answer.

	1 Strongly Disagree	2	3	4	5	6 Strongly Agree
1. I am completely comfortable knowing and interacting with people whose sexual activities significantly differ from my own.	○	○	○	○	○	○
2. I enjoy the opportunity to share my personal views about sexuality	○	○	○	○	○	○
3. My sexual experiences and explorations are a positive, on-going part of who I am.	○	○	○	○	○	○
4. I am comfortable with my sexual activities, both past and present	○	○	○	○	○	○
5. I am comfortable talking about my sexual views, my sexual fantasies, and sexual experiences that I have had.	○	○	○	○	○	○
6. My past sexual experiences and explorations have been very worthwhile.	○	○	○	○	○	○
7. It would not bother me if I knew that a good friend enjoys anal stimulation during masturbation.	○	○	○	○	○	○
8. I can freely discuss sexual topics in a small group of peers.	○	○	○	○	○	○
9. I think it is good for people to experiment with a wide range of sexual practices.	○	○	○	○	○	○

25 Sexual Function, Dysfunction, and Difficulties

Sexual Self-Efficacy Scale for Female Functioning

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The evaluation and alteration of self-efficacy expectations is important in the cognitive-behavioral treatment of psychosexual problems. The Sexual Self-Efficacy Scale for females (SSES-F) is a measure of perceived competence in the behavioral, cognitive, and affective dimensions of female sexual response. Researchers studying womens' perceived sexual self-efficacy, using the SSES-F, have focused on sexual adjustment (Reissing, Laliberte, & Davis, 2005), the effect of first sexual encounters on later sexual self-efficacy (Reissing, Andruff, & Wentland, 2012), body image (Yamamiya, Cash, & Thompson, 2006), perceived objectification by a partner (Ramsey & Hoyt, 2015), marital satisfaction (Oluwole, 2008), and the treatment of genital pain (Sutton, Pukall, & Chamberlain, 2009). Dunkley, Gorzalka, and Brotto (2016) found that poorer sexual self-efficacy was evident in women with eating disorders, calling for attention to sexual concerns as part of treatment for these individuals.

Development

The SSES-F was developed as a multidimensional counterpart to the SSES-E (erectile function in men), and has been used for clinical screening and assessment, as well as for research (Fichten, Budd, Spector et al., 2010; Libman, Rothenberg, Fichten, & Amsel, 1985).

The SSES-F consists of 37 items, sampling capabilities in four phases of sexual response: interest, desire, arousal, and orgasm. In addition, the measure samples diverse aspects of female individual and interpersonal sexual expression (e.g., communication, body comfort and acceptance, and enjoyment of various sexual activities). The instrument includes the following subscales determined by factor analysis (item numbers in parentheses): *Interpersonal Orgasm* (4, 28, 29, 30, 32, 33, 34, 36, 37), *Interpersonal Interest/Desire* (1, 5, 6, 7, 9, 22), *Sensuality* (17, 18, 19, 20, 21, 27), *Individual Arousal* (24, 25, 26, 31), *Affection* (8, 15, 16), *Communication* (12, 13, 14, 23, 35), *Body Acceptance* (2, 3), and *Refusal* (10, 11).

The SSES-F may be used by single or partnered women of all ages. Female respondents indicate which activities they can do and, for each of these, rate their confidence level. In addition, their partners can rate how they perceive the respondents' capabilities and confidence levels.

Response Mode and Timing

For each item, respondents check whether the female can do the described activity and rate her confidence in being able to engage in the activity. Confidence ratings range from 10 (*Quite Uncertain*) to 100 (*Quite Certain*). If an item is unchecked, the corresponding confidence rating is assumed to be zero. The measure takes about 10 to 15 minutes to complete.

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Scoring

The SSES-F yields an overall self-efficacy strength score as well as eight subscale scores. The total strength score is given by the average of the confidence ratings; items not checked in the "Can Do" column are scored as zero. The strength scores for the separate subscales are given by the average of the confidence ratings for that subscale.

Reliability

The SSES-F was administered to a nonclinical sample of 131 women (age range = 25 to 68 years). The sample included 51 married or cohabiting women and 80 single women. Thirty-six of the women completed the SSES-F a second time, after an interval of 4 weeks. The male partners of the 51 married or cohabiting women also completed the SSES-F.

Evaluation of the women's confidence ratings ($N = 131$) included a factor analysis to identify subscales and analyses to assess test–retest reliability and internal consistency. Item analysis demonstrated a high degree of internal consistency (Cronbach's alpha = .93) for the overall test. A factor analysis, using a varimax rotation, yielded eight significant factors, accounting for 68 percent of the total variance. Internal consistency coefficients for the separate subscales ranged from $\alpha = .70$ to $\alpha = .87$. Subscale-total and intersubscale correlations, carried out on the mean confidence score for each subscale, indicated reasonably high subscale-total correlations (range = .31 to .85) and moderate intersubscale correlations (range = .08 to .63).

Test–retest correlations for the total scores ($r = .83$, $p < .001$) and for the subscales (range = .50 to .93) indicate good stability over time. For the married or cohabiting couples, the correlation between the partners' total SSES-F scores was $r = .46$, $p < .001$.

Validity

Creti et al. (1989) reported on a preliminary validity analysis for the SSES-F. Both nonclinical and clinical samples were administered the SSES-F along with a test battery including measures of psychological, marital, and sexual adjustment and functioning. The overall strength score of the SSES-F was found to correlate significantly with other measures of sexual functioning, such as the Sexual History Form (Nowinski & LoPiccolo, 1979), the Golombok Rust Inventory of Sexual Satisfaction (Rust & Golombok, 1985), and the Sexual Interaction Inventory (LoPiccolo & Steger, 1974), and with marital satisfaction (Locke Wallace Marital Adjustment Scale; Kimmel & Van der Veen, 1974). In addition, the overall strength scores of the SSES-F were significantly lower for sexually dysfunctional women who presented for sex therapy at our clinic than for those of a sample of women from the community who reported no sexual dysfunction. Women who presented for sex therapy also showed significantly lower scores than the community sample on the *Interpersonal Orgasm, Interpersonal Interest, Desire, Sensuality, and Communication* subscales. Creti et al. (1989) found that older women (age > 50) had significantly lower total strength scores than younger women (age < 50).

Reissing et al. (2005) found that sexual self-efficacy, as measured by the SSES-F, was a mediating variable between sexual self-schema and sexual adjustment. Sutton et al. (2009) reported that women with provoked vestibulodynia had lower scores on the total SSES-F score as well as on the sensuality, affection, and communication subscales compared to controls. Rajabi and Jelodari (2015) carried out a factor analysis of a Persian translation of the measure administered to married university women in Iran. They found a somewhat different factor structure, underlining the importance cultural differences in measurement of sexual adjustment and practice. The SSES-F has been translated into German and validated with a large online sample (Villwock, 2018).

Other Information

The SSES-F is available in the French language.

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Exhibit

Sexual Self-Efficacy Scale for Female Functioning

The attached form lists sexual activities that women engage in.

For women respondents only: Under *column I* (Can Do), check the activities *you think you could do* if you were asked to do them today. For *only* those activities you checked in column I, rate your *degree of confidence* that you could do them by selecting a number from 10 to 100 using the scale given below. Write this number in *column II* (Confidence).

For partners only: Under *column I* (Can Do), check the activities you think *your female partner could do* if she were asked to do them today. For only those activities you checked in column I, rate your *degree of confidence* that your female partner could do them by selecting a number from 10 to 100 using the scale given below. Write this number in *column II* (Confidence).

If you think your partner is *not* able to do a particular activity, leave columns I *and* II *blank* for that activity.

	I.	II.
	Check if Female Can Do	Rate Confidence (10 = *Quite Uncertain*—100 = *Quite Certain*)
1. Anticipate (think about) having intercourse without fear or anxiety.	☐	___
2. Feel comfortable being nude with the partner.	☐	___
3. Feel comfortable with your body.	☐	___
4. In general, feel good about your ability to respond sexually.	☐	___
5. Be interested in sex.	☐	___
6. Feel sexual desire for the partner.	☐	___
7. Feel sexually desirable to the partner.	☐	___
8. Initiate an exchange of affection without feeling obliged to have sexual relations.	☐	___
9. Initiate sexual activities.	☐	___
10. Refuse a sexual advance by the partner.	☐	___
11. Cope with the partner's refusal of your sexual advance.	☐	___
12. Ask the partner to provide the type and amount of sexual stimulation needed.	☐	___
13. Provide the partner with the type and amount of sexual stimulation requested.	☐	___
14. Deal with discrepancies in sexual preference between you and your partner.	☐	___
15. Enjoy an exchange of affection without having sexual relations.	☐	___
16. Enjoy a sexual encounter with a partner without having intercourse.	☐	___
17. Enjoy having your body caressed by the partner (excluding genitals and breasts).	☐	___
18. Enjoy having your genitals caressed by the partner.	☐	___

19.	Enjoy having your breasts caressed by the partner.	☐	___
20.	Enjoy caressing the partner's body (excluding genitals).	☐	___
21.	Enjoy caressing the partner's genitals.	☐	___
22.	Enjoy intercourse.	☐	___
23.	Enjoy a lovemaking encounter in which you do not reach orgasm.	☐	___
24.	Feel sexually aroused in response to erotica (pictures, books, films, etc.).	☐	___
25.	Become sexually aroused by masturbating when alone.	☐	___
26.	Become sexually aroused during foreplay when both partners are clothed.	☐	___
27.	Become sexually aroused during foreplay when both partners are nude.	☐	___
28.	Maintain sexual arousal throughout a sexual encounter.	☐	___
29.	Become sufficiently lubricated to engage in intercourse.	☐	___
30.	Engage in intercourse without pain or discomfort.	☐	___
31.	Have an orgasm while masturbating when alone.	☐	___
32.	Have an orgasm while the partner stimulates you by means other than intercourse.	☐	___
33.	Have an orgasm during intercourse with concurrent stimulation of the clitoris.	☐	___
34.	Have an orgasm during intercourse without concurrent stimulation of the clitoris.	☐	___
35.	Stimulate a partner to orgasm by means other than intercourse.	☐	___
36.	Stimulate a partner to orgasm by means of intercourse.	☐	___
37.	Reach orgasm within a reasonable period of time.	☐	___

Decreased Sexual Desire Screener

Anita H. Clayton,[2] *University of Virginia*
Irwin Goldstein, *San Diego Sexual Medicine*
Leonard R. Derogatis, *Maryland Center for Sexual Health*
Robert Pyke, *Pykonsult LLC*

The Decreased Sexual Desire Screener (DSDS) is a brief diagnostic instrument to assist in making the diagnosis of generalized acquired Hypoactive Sexual Desire Disorder (HSDD) in pre-, peri- and postmenopausal women. The DSDS has been validated for use by clinicians who are neither trained nor specialized in the diagnosis of Female Sexual Dysfunction (FSD).

The DSDS consists of four *Yes* or *No* questions (i.e., "In the past, was your level of sexual desire or interest good and satisfying to you?," "Has there been a decrease in your level of sexual desire or interest?," "Are you bothered by your decreased level of sexual desire or interest?," "Would you like your level of sexual desire or interest to increase?") and a fifth, seven-part question covering factors relevant to the differential diagnosis of HSDD.

The DSDS was developed specifically to assist clinicians in identifying generalized acquired HSDD and not to diagnose or exclude other female sexual disorders (e.g., Female Sexual Arousal Disorder [FSAD] or Female

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Orgasmic Disorder [FOD]), although these may be concurrent with HSDD.

The understandability of the DSDS to women and the adequacy of the items for diagnosis by clinicians who were neither trained nor specialized in the diagnosis of FSD were evaluated in a nontreatment study (Clayton et al., 2009).

Response Mode and Timing

A patient is to answer the first four questions with dichotomous responses of *Yes* or *No* relating to whether their sexual desire has decreased and whether this bothers her, and then check all the factors in Question 5 that she feels may be contributing to the decrease in sexual desire or interest that she is currently experiencing. Subsequently, the woman's responses are reviewed, and etiological importance considered, if needed, by a clinician, who decides whether a diagnosis of generalized acquired HSDD according to the DSM-IV-TR criteria (American Psychiatric Association, 2000) is warranted.

Scoring

If the patient answers *No* to any of the Questions 1 through 4, then she does not qualify for a diagnosis of generalized acquired HSDD. If a patient answers *Yes* to all of the questions 1 through 4 and *No* to all of the factors in Question 5 after clinician review, she would meet the criteria for a diagnosis of generalized acquired HSDD. If the patient answers *Yes* to all of the Questions 1 through 4 and *Yes* to any of the factors in Question 5, then the clinician would decide whether a primary diagnosis other than generalized acquired HSDD is more appropriate. Comorbid conditions such as FSAD or FOD do not rule out a concurrent diagnosis of HSDD.

Validity

The validity of the DSDS was established in a nontreatment validation study in North America (Clayton et al., 2009) which included 263 pre-, peri- and postmenopausal women aged 18 to 50 years with and without FSD (141 subjects had a primary diagnosis of HSDD, 47 subjects had a primary diagnosis of another FSD [i.e., not HSDD], 75 subjects had no FSD). Participants in the study were required to be in a stable, communicative, monogamous heterosexual relationship with a sexually functional partner for at least 1 year. Participants were excluded if they had any clinically significant medical or psychiatric condition or had used any medication that was likely to affect their sexual function within the previous 4 weeks.

Participants completed the DSDS at screening and their responses were reviewed with a nonexpert clinician who was neither trained nor specialized in FSD, who then decided whether a diagnosis of generalized acquired HSDD was warranted. A clinician who was an expert in FSD then independently conducted an extensive diagnostic interview to diagnose sexual disorders. The diagnoses obtained using the two methods (generalized acquired HSDD or not) were compared. In this nontreatment study, the sensitivity and specificity of the DSDS were .836 and .878, respectively.

Feedback on the use of the DSDS from a debriefing exercise involving a subset of 89 women in the nontreatment study showed that 85.4% of participants were able to understand all five questions. Further, nonexpert clinicians who were debriefed on how useful the DSDS was after 253 of the 263 interviews indicated that they could use the tool to reliably rule in or out HSDD in 93% of cases.

The validity of the DSDS was replicated during the screening visit of 2 clinical trials (Clayton et al., 2013): in 921 premenopausal women aged ≥18 years with decreased sexual desire screened for enrollment in the North American Phase III randomized withdrawal trial of flibanserin known as the Researching Outcomes on Sustained Efficacy (ROSE) study (Goldfischer et al., 2008), and in 513 premenopausal European women aged ≥18 years with decreased sexual desire who were screened for enrollment into the eurOpean ResearCH In Decreased sexual desire (ORCHID) trial, a Phase III trial of flibanserin in premenopausal women with HSDD (Clayton et al., 2013).

Using the same methodology as described above, premenopausal women diagnosed with hypoactive sexual desire disorder by sexual medicine experts were assessed using the Decreased Sexual Desire Screener by clinicians not trained in the diagnosis of female sexual dysfunction. In the North American ROSE study, the sensitivity of the DSDS was .946. Among the women in the European ORCHID trial completing the DSDS in their native language, the sensitivity of the DSDS was .956. Specificity was not calculated, as these trials involved a clinical population of women with complaints of low sexual desire.

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Exhibit

Decreased Sexual Desire Screener

Please answer the following questions:

	Yes	No
1. In the past, was your level of sexual desire or interest good and satisfying to you?	○	○
2. Has there been a decrease in your level of sexual desire or interest?	○	○
3. Are you bothered by your decreased level of sexual desire or interest?	○	○
4. Would you like your level of sexual desire or interest to increase?	○	○

5. Please check all the factors that you feel may be contributing to your current decrease in sexual desire or interest:

	Yes	No
A. An operation, depression, injuries, or other medical condition	○	○
B. Medications, drugs or alcohol you are currently taking	○	○
C. Pregnancy, recent childbirth, menopausal symptoms	○	○
D. Other sexual issues you may be having (pain, decreased arousal or orgasm	○	○
E. Your partner's sexual problems	○	○
F. Dissatisfaction with your relationship or partner	○	○
G. Stress or fatigue	○	○

Brief Diagnostic Assessment for Generalized Acquired Hypoactive Sexual Desire Disorder (HSDD)

Clinician:

Verify with the patient each of the answers she has given.

The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision® characterizes Hypoactive Sexual Desire Disorder (HSDD) as a deficiency or absence of sexual fantasies and desire for sexual activity, which causes marked distress or interpersonal difficulty, and which is not better accounted for by a medical, substance-related, psychiatric, or other sexual condition. HSDD can be either generalized (not limited to certain types of stimulation, situations, or partners) or situational, and can be either acquired (develops only after a period of normal functioning) or lifelong. To determine if symptoms are acquired, ask if there was a period of normal functioning at any time in the past.

If the patient answers "**No**" to any of the questions 1 through 4, then she does not qualify for the diagnosis of generalized, acquired HSDD.

If the patient answers "**Yes**" to all of the questions 1 through 4, and your review confirms "**No**" answers to all of the factors in question 5, then she does qualify for the diagnosis of generalized, acquired HSDD.

If the patient answers "**Yes**" to all of the questions 1 through 4 and "**Yes**" to any of the factors in question 5, then decide if the answers to question 5 indicate a primary diagnosis other than generalized, acquired HSDD. Co-morbid conditions such as arousal or orgasmic disorder do not rule out a concurrent diagnosis of HSDD.

Based on the above, does the patient have generalized acquired Hypoactive Sexual Desire Disorder?	YES	NO
	❑	❑

Thank you.

Goldfischer ER, Clayton AH, Goldstein I, Lewis-D'Agostino DJ, Pyke R. *Decreased Sexual Desire Screener© (DSDS©) for diagnosis of Hypoactive Sexual Desire Disorder in women*. Poster presented at the ACOG annual meeting, 3–7 May 2008, New Orleans, USA.

Sexual Interest and Desire Inventory—Female

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The Sexual Interest and Desire Inventory—Female (SIDI-F) is a clinician-administered instrument designed to quantitatively assess Hypoactive Sexual Desire Disorder (HSDD) severity in women. It is a 13-item instrument available for public use.

The SIDI-F is a clinician-rated instrument consisting of 13 items (relationship—sexual, receptivity, initiation, desire—frequency, affection, desire—satisfaction, desire—distress, thoughts—positive, erotica, arousal—frequency, arousal ease, arousal continuation, and orgasm), as well as a five-item diagnostic module. The items in the diagnostic module are for information purposes on common interfering conditions (e.g., fatigue, depression, and pain) and do not contribute to the total score.

The SIDI-F was developed in a collaborative effort by a group of academic sexual dysfunction researchers, pharmaceutical industry professionals, and clinicians. It originally consisted of 17 items but was modified following preliminary testing and item response analysis (Sills et al., 2005). The resulting "near-final" version, consisting of a 13-item clinician-rated instrument with 30-day recall, was tested for reliability and validity in a two-center North American pilot validation study conducted on 90 women with HSDD, Female Orgasmic Disorder (FOD), or no Female Sexual Dysfunction (FSD; Clayton et al., 2006). The reliability and validity of the final version of the SIDI-F were subsequently established in two multicenter, non-treatment studies, conducted in North America (N = 223) and Europe (N = 254), in women with HSDD (both studies), Female Sexual Arousal Disorder (FSAD; North American study only), or no FSD (both studies; Lewis-D'Agostino et al., 2007; Nappi et al., 2008).

The SIDI-F is designed to assess HSDD severity in adult women, regardless of age, menopausal status, or country. It was validated for use by clinicians trained in FSD, so its use by untrained clinicians to evaluate patients against a normative sample can only be advisory. However, its ease of use and the low level of interpretation required by the clinician are highly compatible with use by all clinicians to monitor changes in symptoms over time with treatment, especially by clinicians experienced in treating FSD.

Response Mode and Timing

Following a brief introduction, the administering clinician progresses through the 13 items of the instrument with the respondent. Each item consists of one or two questions, which are read verbatim by the clinician. Supplementary information is provided to guide more specific probes. Additional questions are asked until the respondent gives a clear answer to which the clinician can assign a specific severity score. The SIDI-F takes approximately 15 minutes to administer.

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Scoring

The SIDI-F uses two kinds of ratings: eight items are rated in terms of symptom intensity only, whereas five items are rated in terms of both symptom intensity and frequency. The five dual-rated items are arranged in a grid: symptom intensity increases from left to right and symptom frequency increases from top to bottom. The intersection of these points gives the overall severity rating.

Items are rated from 0 to 3, 4, or 5, depending on the item. The total score ranges from 0 to 51, with higher scores indicating greater levels of sexual interest. A total score of 33 or less indicates the presence of HSDD (Clayton, Segraves et al., 2010).

Reliability

For all subjects, the Cronbach's alpha for the SIDI-F was .90 on both day 0 and day 28 in the North American study (N = 223). In the European study (N = 254), the corresponding values were .93 and .92 on day 0 and day 28, respectively.

Test–retest reliability was assessed using the Pearson correlation and intraclass correlation coefficient (ICC). For all subjects, the Pearson correlation coefficient and ICC for the SIDI-F score between day 0 and day 28 were .86 and .85, respectively, in the North American study, and .91 and .90, respectively, in the European study (Clayton, Goldmeier et al., 2010; Lewis-D'Agostino et al., 2007; Nappi et al., 2008).

Validity

For discriminant validity, a two-way analysis of covariance, with age categories and country as fixed effects, was used. In the North American study, the SIDI-F score was significantly lower for women diagnosed with HSDD than those diagnosed with FSAD, or with no FSD, at day 0 ($p < .001$, for both; Lewis-D'Agostino et al., 2007). In the European study, the SIDI-F score was significantly lower for women diagnosed with HSDD than those with no FSD at day 0 ($p < .001$; Nappi et al., 2008). Similar findings were seen for women age 50 or younger and over 50 years of age in both studies. Further, the SIDI-F score showed discriminant validity regardless of menopausal status (both studies), or country (European study only).

Convergent validity was assessed by comparing responses on the SIDI-F to those on the Female Sexual Function Index (FSFI; Meston, 2003; Rosen et al., 2000) and the Changes in Sexual Functioning Questionnaire—Female (CSFQ-14-F; Clayton, McGarvey, & Clavet, 1997; Keller, McGarvey, & Clayton, 2006) using Pearson's correlation. In both studies, the SIDI-F score was highly correlated (all rs > .60) with FSFI and CSFQ-F total scores in women with HSDD at day 0 (irrespective of age group), demonstrating convergent validity (Lewis-D'Agostino et al., 2007; Nappi et al., 2008).

Divergent validity was assessed by comparing responses on the SIDI-F with those on the Locke-Wallace Marital Adjustment Scale (MAS; Locke & Wallace, 1959) using Pearson's correlation. In both studies, the SIDI-F score was not highly correlated with the MAS score in women with HSDD at day 0 (.02 and .23 for the two studies, irrespective of age group), demonstrating divergent validity (Lewis-D'Agostino et al., 2007; Nappi et al., 2008).

Sensitivity to change was assessed retrospectively in the North American and European studies. At study end, the percentage change from baseline in SIDI-F score was significantly correlated with percentage change in FSFI total and desire domain scores in both studies ($p < .0001$, for all). Sensitivity to therapeutically induced change was demonstrated in two proof-of-concept trials of an agent to treat HSDD; SIDI-F score was significantly correlated with the Clinical Global Impression of Improvement score (which assesses overall improvement in sexual functioning with study medication throughout the 12-week treatment period in both studies ($p < .0001$, for all; data on file, Boehringer Ingelheim).

A version of the SIDI-F has been developed for use in Iran, with validation and reliability consistent with the US and EU studies (Malary, Pourasqhar, Khani, Moosazadeh, & Hamzehgardeshi, 2016).

Other Information

The SIDI-F was developed and validated by Drs. Anita Clayton, Sandra Leiblum, Kenneth R. Evans, Terrence Sills, Robert Pyke, Rosemary Basson, and R. Taylor Segraves. This instrument was copyrighted in 2004 and use by the scientific community is encouraged and free of charge as long as the copyright is acknowledged, and the instrument is not altered or modified. Inquiries may be addressed to Dr. Anita H. Clayton at the University of Virginia, 2955 Ivy Rd, Northridge Suite 210, Charlottesville, VA 22903; ahc8v@virginia.edu

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Exhibit

Sexual Interest and Desire Inventory

The following questions are used to assess your feelings of sexual interest or desire as well as some other aspects of your sex life. By sexual desire, I mean your interest in having a sexual experience whether alone or with a partner. Sexual interest involves thoughts, feelings, and/or a willingness to become involved in some sort of sexual activity.

Please remember that there are no right or wrong answers to the questions I will be asking. I am most interested in what you feel—*not* what you think you should feel or what you think others feel. If you do not understand any of the questions, please let me know.

The following question asks you about your relationship with your partner/spouse.

Item 1: Relationship—Sexual

How satisfied are you with the sexual aspect of your relationship with your partner?

- ○ 0 Dissatisfied
- ○ 1 Somewhat dissatisfied
- ○ 2 Neutral
- ○ 3 Somewhat satisfied
- ○ 4 Satisfied

Over the past month, approximately how many times did you engage in sexual activity either alone or with your partner? By sexual activity, I am referring to sexual caressing, genital stimulation (including masturbation) or intercourse.

- ○ Never
- ○ 1–2 times a month?
- ○ 3–4 times a month?
- ○ More than once a week?

I will now be asking you more specific questions about your sexual experiences.

The following questions investigate your interest/enthusiasm and pleasure you may (or may not) experience when you think generally about sexual matters or when you actually think about engaging in sex.

Item 2: Receptivity

Over the past month, did your partner approach you for sex?

When you accepted, what was your level of enthusiasm?

Partner never approached for sex	0			
No enthusiasm or did not participate	0			
	Participated solely/primarily out of obligation	Participated with some interest, but little sexual enthusiasm	Receptive to partner's approach, interested sexually	Sexually enthusiastic and encouraging
Infrequent (less than half the time)	0	1	2	3
Often (half the time or more, but not always)	1	2	3	4
Always	1	3	4	5

Item 3: Initiation

Over the past month, how frequently did you do anything to encourage sex with your partner?

○ 0 Did not encourage/initiate
○ 1 1–2 times/month
○ 2 3–4 times/month
○ 3 More than once a week

The next questions are about your overall level of desire.

Item 4: Desire—Frequency

Over the past month, how frequently have you wanted to engage in some kind of sexual activity, either with or without a partner?

How strong was your desire to engage in sex?

Please answer this question even if you did not actually engage in any sexual activity but were aware of wanting to be sexual in some way.

Never wanted to have sex	0			
	Not intense at all (indifferent, neutral, fleeting)	Mildly intense	Moderately intense	Extremely intense
1–2 times/month	0	1	2	3
3–4 times/month	1	2	3	4
More than once a week	1	3	4	5

Item 5: Affection

Over the past month, how often have you wanted physical affection other than sex, e.g., touching, holding, kissing? How intense would you say was your desire for physical affection?

Never wanted to have physical affection	0		
	Mildly intense	Moderately intense	Extremely intense
Less than once a week	1	2	3
More than once a week but not every day	2	3	4
Daily	3	4	5

Item 6: Desire—Satisfaction

Over the past month, how satisfied were you with your overall level of sexual desire/interest?

- ○ 0 Dissatisfied
- ○ 1 Somewhat dissatisfied
- ○ 2 Neutral
- ○ 3 Somewhat satisfied
- ○ 4 Satisfied

Item 7: Desire—Distress

Over the past month, when you thought about sex or were approached for sex, how distressed (worried, concerned, guilty) were you about your level of desire?

- ○ 4 Never distressed
- ○ 3 Mildly distressed
- ○ 2 Moderately distressed
- ○ 1 Markedly distressed
- ○ 0 Extremely/severely distressed

The following questions are about any thoughts related to sex you may have had over the past month.

Item 8: Thoughts—Positive

How often have you thought about sex over the past month?

When you thought about sex, what was your level of interest/strength of desire in having sex?

Never thought about sex	0			
	Never associated with desire	Mild desire	Moderate desire	Intense desire
1–2 times/month	0	1	2	3
3–4 times/month	1	2	3	4
More than once a week	1	3	4	5

Item 9: Erotica

Over the past month, how did you react to sexually suggestive material (e.g., love scenes in movies and on television, erotic pictures/stories in magazines/books)?

- ○ 0 Not interested
- ○ 1 Mildly interested
- ○ 2 Moderately interested
- ○ 3 Highly interested

The next questions relate to how aroused you became in response to sexual stimuli/stimulation over the past month.

Item 10: Arousal—Frequency

Over the past month, when you had sex, how often did you become aroused (sexually excited, wet, lubricated, etc.)?

- ○ 0 No sexual activity
- ○ 0 Never became aroused
- ○ 1 Infrequent (less than half the time)
- ○ 2 Often (half the time or more, but not always)
- ○ 3 Always

Item 11: Arousal Ease

Over the past month, when you had sex, how easily did you become aroused (sexually excited, wet, lubricated, etc.) in response to sexual stimulation?

- ○ 0 No sexual activity
- ○ 0 Not at all aroused
- ○ 1 Aroused with difficulty
- ○ 2 Aroused somewhat easily
- ○ 3 Easily aroused

Item 12: Arousal Continuation

Over the past month, once you started to become sexually aroused, did you want to receive more stimulation?

If yes, how strong was your desire to be further/more sexually stimulated?

- ○ 0 No sexual activity
- ○ 0 No desire/Never aroused
- ○ 1 Little desire
- ○ 2 Moderate desire
- ○ 3 Strong desire

Item 13: Orgasm

Over the past month, when you had sex, how often did you have an orgasm?

How easy was it for you to have an orgasm?

No sexual activity	0	
Not able to achieve orgasm	0	
	Achieved majority of orgasms with some difficulty	Achieved majority of orgasms without difficulty
Infrequent (less than half the time)	1	2
Often (half the time or more, but not always)	2	3
Always	3	4

Changes in Sexual Functioning Questionnaire

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Assessment of sexual functioning is an important component in many clinical encounters, and in research settings it is increasingly of interest with regard to side effects of new medications. Developers of the CSFQ are Anita H. Clayton and Elizabeth L McGarvey who were affiliated with University of Virginia School of Medicine when the scale was developed and validated. Adequate sexual functioning for most people is an important factor for good quality of life. There is a need for brief, easy-to-use assessment instruments that provide valid and reliable indicators of the sexual health of the individual. The Changes in Sexual Functioning Questionnaire (CSFQ)

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was developed with specific versions for women and men to assess sexual functioning in all the domains of the sexual response cycle. It was developed to be used in both clinical and research settings (Clayton, McGarvey, Clavet, & Piazza, 1997).

Development

The CSFQ was developed from patient complaints of sexual dysfunction (SD), focus groups, and published sexual side effects of medications. The clinical interview (CSFQ-I) was intended for use in the diagnosis and management of sexual dysfunction in patients who were in treatment in an outpatient psychiatric clinic. The CSFQ-I includes 35 items for females and 36 items for males, and also included a section for medical disorders and medication use. At the time of its development, most research on sexual dysfunction focused on problems among males, such as erectile dysfunction, and the available research instruments did not adequately capture specific female symptoms of sexual problems relating to reduced quality of life, such as lack of desire. The CSFQ-I was used clinically and included a section to identify the sexual pattern of the individual, which permitted documentation of how much change in sexual functioning was experienced over time. In addition, information on medication use was collected. The documentation of change could be tied to the five domains of sexual functioning so that the clinician could better focus on strategically targeted treatment for the cause of the problem, which could be related to medication, illness, relationship problems, or a combination of difficulties. In addition, the CSFQ-I addressed the need for an assessment instrument that could differentiate current sexual dysfunction from previous "normal" or adequate sexual function and/or lifelong sexual dysfunction.

The original CSFQ items were field tested and revised on the basis of conceptual content to ensure that five aspects of sexual functioning (i.e., sexual desire, sexual frequency, sexual satisfaction, sexual arousal, and sexual completion/orgasm) were captured. To establish face validity, other physicians, clinicians, and researchers reviewed the items for accuracy and clarity. Reliability and validity were established for the clinical interview version, with 14 scored items (Clayton, McGarvey, & Clavet, 1997; Clayton, McGarvey, Clavet, & Piazza, 1997) with validation replication in Spain (Bobes et al., 2000). Male- and female-specific self-report shorter versions were developed that included only the 14 scored items from the validation of the interview version: the CSFQ-14-F for females and the CSFQ-14-M for males (Keller, McGarvey, & Clayton, 2006), also with validation in Spain (Garcia-Portilla et al., 2011). The CSFQ-14 has been linguistically validated in over 75 languages.

The CSFQ has been used in numerous studies of nonclinical (Clayton, Clavet, McGarvey, Warnock, & Weihs, 1999; Llaneza et al., 2011; Ornat et al., 2013; Warnock et al., 2005) and clinical samples, such as women survivors of gynecological cancer (Lagana, McGarvey, Classen, & Koopman, 2001), and in numerous studies on sexual dysfunction associated with medications for depression (Clayton et al., 2002), including adolescents (Deumic et al., 2016), adults, and elders. The CSFQ-14 items are not presented here but are available in Keller et al. (2006) as well as by request from the first author: ahc8v@virginia.edu.

Response Mode and Timing

The CSFQ-I has items stated as questions that are rated by the clinician during a clinical interview, or for CSFQ-14-F self-scored by females and CSFQ-14-M self-scored by males in either a clinical or a research setting. In the self-report, the patient should be asked to complete *all* 14 items of the CSFQ. The patient should place a check in the box corresponding to the response for that particular item. The patient should choose only one response per item.

Items 1–6 and 13–14 are the same for men and women; Items 7–12 are gender-specific. Each item is scored on a 5-point scale that is linked to specific self-reported information. A response of "1" on the scale typically indicates *Never* or *No Enjoyment or Pleasure*, depending upon whether the response item is to determine frequency of occurrence or perception of satisfaction in a stated area, whereas a "5" indicates *Every Day* or *Always* in like manner. The response time for the CSFQ-I is between 30 and 45 minutes for the interview. The response time for the CSFQ-14-F and CSFQ-14-M is between three and five minutes.

Scoring

The CSFQ-I scoring booklet may be obtained from the first author.

To score items on the CSFQ-14, take the numerical value or weight indicated for a particular response. For example, in Item 1, a response of "some enjoyment or pleasure" has a numerical value of 3, whereas a response of "much enjoyment or pleasure" has a numerical value of 4. Two items (Item 10 and Item 14) have responses that are reverse scored: for example, on Item 14 in the CSFQ14-F version, a response of "never" has a numerical value of 5, whereas a response of "every day" has a value of 1.

A CSFQ-14 total score for both female and male versions is obtained by summing the value of Items 1 to 14. Scores ≤ 41 for females and ≤ 47 for males indicate sexual dysfunction.

To calculate subscale scores, add up the values for only the items that correspond to a particular subscale: *Pleasure* (Item 1); *Desire/Frequency* (Item 2 + Item 3); *Desire/Interest* (Item 4 + Item 5 + Item 6); *Arousal/Excitement* (Item 7 + Item 8 + Item 9); *Orgasm/Completion* (Item 11 + Item 12 + Item 13).

Five subscale scores with established thresholds indicating sexual dysfunction were derived from nonoverlap of the confidence intervals around the means

for individuals with sexual dysfunction vs. normal controls: *Pleasure* (scores ≤ 4); *Desire/Frequency* (summed scores ≤ 6 for women and ≤ 8 for men); *Desire/Interest* (summed scores ≤ 9 for women and ≤ 11 for men); *Arousal/Excitement* (summed scores ≤ 12 for females and ≤ 13 for males); and *Orgasm/Completion* (summed scores ≤ 11 for females and ≤ 13 for males). Items 10 and 14 are included in the total score, but do not map to a subscale dimension.

Reliability and Validity

For the CSFQ-I, alpha coefficients and item total correlations range from .45 to .60 with concurrent validation demonstrated using the Derogatis Interview for Sexual Functioning (Derogatis, 1997) and high test–retest reported (Clayton, McGarvey, & Clavet, 1997). For the CSFQ-14-F and CSFQ-14-M versions, Cronbach's alpha coefficient of internal reliability for the total score and the original five subscales was established in addition to other analyses for each version of the measure. The alpha coefficient for the CSFQ-14-F was .90 and for the CSFQ-14-M it was .89 (Keller at al., 2006).

Additional studies have demonstrated the CSFQ is sensitive to bidirectional changes over time (Bobes et al., 2002) and in multiple studies to distinguish differences between medications (Clayton, Pradko et al., 2002); differentiates phases of the sexual response cycle (Clayton, Keller, & McGarvey, 2006); has equivalence of administration via an interactive voice response system vs. paper-and-pencil administration (Dunn, Arakawa, Greist, & Clayton, 2007); measures changes in sexual functioning in studies of antidepressant substitution, adjunctive therapy, and primary sexual disorders (Segraves, Clayton, Croft, Wolf, & Warnock, 2004).

Published reviews have supported the measurement qualities of the CSFQ, including FDA regulatory science forum findings (Kronstein et al., 2015) and the International Consultation in Sexual Medicine from 2004 and 2009.

Other Information

There are over 75 linguistically validated translations of the CSFQ-14 with validation of the Spanish version of the CSFQ-I reported with norms established (Bobes et al., 2000). The CSFQ has been utilized in over 100 studies, including studies in psychiatric populations with diagnoses of major depressive disorder, generalized anxiety disorder, schizophrenia, bipolar illness, OCD, ADHD, primary sexual disorders, alcohol dependence, opioid dependence, and cognitive disorders. Other medical illnesses in which the CSFQ has been administered include cancer, obesity, diabetes mellitus/metabolic syndrome, fibromyalgia, other rheumatologic illnesses, polycystic ovary syndrome, spinal cord injury, benign prostatic hypertrophy, and vulvar pain, as well as with the administration of androgens. Use of the measures for clinical purposes is typically provided upon request to Dr. Clayton. Use of the measures for research may be approved with or without a fee, depending upon the type of project being undertaken. Citation of use is always required.

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Global Sexual Functioning: A Single Summary Score for Nowinski and LoPiccolo's Sexual History Form

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Nowinski and LoPiccolo's Sexual History Form (SHF) is a self-report measure consisting of 46 multiple-choice items that have variable numbers of response options and different response scales (e.g., Item 1 has nine options; Item 18 has six options). Response options are numbered and have a verbal descriptor corresponding to each number. Normative data are available for individual items (see Creti et al., 1998). This entry presents a scoring system for 12 items from the SHF which can represent Global Sexual Functioning (one score for males and one for females). Norms have yet to be established for these Global Sexual Functioning scores.

Development

Although the questionnaire items of the SHF are very informative individually when used in a clinical setting, the 46 individual items were not an efficient way of quantifying sexual functioning for research purposes. Therefore, the summary scores became essential as these allowed investigators the possibility of classifying respondents in terms of level of global sexual functioning.

Response Mode and Timing

Respondents are asked to circle the number that corresponds to the single most appropriate response for each question. The measure requires approximately 15 minutes to complete.

Scoring

The Global Sexual Functioning score is based on 12 items. Because certain items are relevant only for males, whereas others are relevant only for females, the items used to calculate the male and female scores are somewhat different. These items were selected as representative of various domains of sexual functioning: frequency of sexual activities, sexual desire, arousal, orgasmic, and erectile abilities. To arrive at the single summary score, SHF items are grouped into a 12-item scale; this reflects either male or female global sexual functioning. The single summary score is derived by (a) converting the scores on each of the 12 items to a proportion of the maximum possible value (e.g., if on Item 1, where response options are numbered

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TABLE 1
Calculating the Global Sexual Functioning Score

Male		Female	
Item no.	**Divide by**	**Item no.**	**Divide by**
1	9	1	9
2	9	2	9
6	9	6	9
7	9	7	9
10	6	16	5
16	5	23*	5
18	6	24*	5
19	6	25*	5
22	6	26*	5
23*	5	27*	5
24*	5	29	6
25*	5	37*	5

Note. Score as follows: (a) convert scores to proportions, (b) sum proportions, and (c) divide by number of items. Although all items included in the Global Sexual Functioning score are present in the original 28-item version, items have been renumbered in the current 46-item version.
*Responses equaling 6 are considered missing.

1 to 9, the respondent answers "(4) twice a week," this is converted to 4/9 = .44), (b) summing the 12 proportions, and (c) calculating the mean by dividing the total by the number of items that the respondent is deemed to have answered (usually 12). The resulting mean value, which is the Global Sexual Functioning score, will be greater than 0 and less than 1.

Specified in Table 1 are the items included in the calculation of the Global Sexual Functioning score. For items with an asterisk, responses equaling 6 are considered missing because this response option is *have never tried*; in this case, the summed proportions are divided not by 12 but by the number of items that are deemed to have been answered (i.e., not missing). The scoring system is summarized in Table 1. Lower scores indicate better functioning.

Reliability

Temporal stability for the GSF ranged from .92 (Creti, Fichten, Libman, Amsel, & Brender, 1988; $N = 27$) to .98 (Libman et al., 1989; $N = 45$). Internal consistency ranged from .50 to .70 (Creti et al., 1988).

Validity

Male Global Sexual Functioning

Data reported to date indicate the following: (a) The GSF score can differentiate sexually well-functioning from poorly functioning men, and it is responsive to changes with therapy (Creti, Fichten, Libman, Kalogeropoulos, & Brender, 1987; Kalogeropoulos, 1991); (b) the GSF score was found to be logically and significantly related to scores on measures of sexual satisfaction, sexual repertoire, sexual self-efficacy, sexual drive, sexual knowledge, and liberal attitudes (Creti et al., 1987; Creti & Libman, 1989; Meana & Nunnink, 2006); and (c) the GSF score is sensitive to age differences in sexual functioning (Brown, Balousek, Mundt, & Fleming, 2005; Creti et al., 1987; Creti & Libman, 1989; Libman et al., 1989; Libman et al., 1991).

Female Global Sexual Functioning

Data reported by Creti et al. (1988) indicate that (a) women with diagnosed sexual dysfunction had worse scores ($M = .68$, $SD = 17$) than women who were functioning well ($M = .49$, $SD = .14$), (b) that younger women (age 21–46) had better scores ($M = .46$, $SD = .03$) than older women (age greater than 64; $M = .62$, $SD = .16$), and (c) that female GSF scores were logically and significantly correlated with sexual harmony, sexual drive, diversity of sexual repertoire, and sexual satisfaction. Meana and Nunnink (2006) also found significant correlations with sexual satisfaction, fantasies, experiences, and liberal attitudes. The GSF score was also found to be related to the female's sexual efficacy expectations for her male partner (Creti & Libman, 1989).

Reissing, Binik, Khalifé, Cohen, and Amsel (2003) found worse global sexual functioning scores in women with vaginismus ($M = 52.57$) and women with vulvar vestibulitis syndrome $M = 56.72$) than in women with no pain ($M = 38.00$). Leclerc, Bergeron, Binik, and Khalifé (2010) found that women with a history of sexual abuse involving penetration had worse GSF scores than women who had not suffered sexual abuse.

Bergeron et al. (2001) found that scores significantly improved from posttreatment to 6-month follow-up in a sample of females who underwent cognitive-behavioral therapy, electromyographic biofeedback, or vestibulectomy in the treatment of dyspareunia resulting from vulvar vestibulitis.

The GSF score has also been used to validate the Pelvic Organ Prolapse-Urinary Incontinence Sexual Functioning Questionnaire (PISQ; Rogers, Kammerer-Doak, Villarreal, Coates, & Qualls, 2001) and its modified short form (Rogers, Coates, Kammerer-Doak, Khalsa, & Qualls, 2003), an instrument in urogynecology that is specifically designed to measure sexual function in women with pelvic organ prolapse or incontinence.

Psychometric properties for the Male and Female Global Sexual Functioning scores suggest that these provide a good index of the underlying construct. Even in the absence of norms, the score is useful in research and practice. It allows investigators to classify respondents in terms of level of overall sexual functioning by using a mean or median split.

Other Information

The 28-item version of the SHF has been translated into French (Formulaire d'Histoire Sexuelle) and Spanish (Avila Escribano, Perez Madruga, Olazabal Ulacia, & Lopez Fidalgo, 2004).

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Exhibit

Global Sexual Functioning: A Single Summary Score for Nowinski and LoPiccolo's Sexual History Form (SHF)

Please circle the most appropriate response to each question.

1. How frequently do you and your mate have sexual intercourse or activity?

   1) more than once a day
   2) once a day
   3) three or four times a week
   4) twice a week
   5) once a week
   6) once every two weeks
   7) once a month
   8) less than once a month
   9) not at all

2. How frequently would you like to have sexual intercourse or activity?

   1) more than once a day
   2) once a day
   3) three or four times a week
   4) twice a week
   5) once a week
   6) once every two weeks
   7) once a month
   8) less than once a month
   9) not at all

3. Who usually initiates sexual intercourse or activity?

   1) I always do
   2) I usually do
   3) my mate and I initiate about equally often
   4) my mate usually does
   5) my mate always does

4. Who would you ideally like to initiate sexual intercourse or activity?

   1) myself, always
   2) myself, usually
   3) my mate and I equally often
   4) my mate, usually
   5) my mate, always

5. When your mate makes sexual advances, how do you usually respond?

   1) I usually accept with pleasure
   2) accept reluctantly
   3) often refuse
   4) usually refuse

6. How often do you experience sexual *desire* (this may include wanting to have sex, planning to have sex, feeling frustrated due to lack of sex, etc.)?

   1) more than once a day
   2) once a day
   3) three or four times a week
   4) twice a week
   5) once a week
   6) once every two weeks
   7) once a month
   8) less than once a month
   9) not at all

7. How often do you masturbate (bring yourself to orgasm in private)?

   1) more than once a day
   2) once a day
   3) three or four times a week
   4) twice a week
   5) once a week
   6) once every two weeks
   7) once a month
   8) less than once a month
   9) not at all

8. For how long do you and your mate usually engage in sexual foreplay (kissing, petting, etc.) before having intercourse?

   1) less than 1 minute
   2) 1 to 3 minutes
   3) 4 to 6 minutes
   4) 7 to 10 minutes
   5) 11 to 15 minutes
   6) 16 to 30 minutes
   7) 30 minutes to one hour

9. How long does intercourse usually last, from entry of the penis to the male's orgasm/climax?

   1) less than 1 minute
   2) 1 to 2 minutes
   3) 2 to 4 minutes
   4) 4 to 7 minutes
   5) 7 to 10 minutes
   6) 11 to 15 minutes
   7) 15 to 20 minutes
   8) 20 to 30 minutes
   9) more than 30 minutes

10. Does the male ever reach orgasm while he is trying to enter the vagina with his penis?

    1) never
    2) rarely (less than 10% of the time)
    3) seldom (less than 25% of the time)
    4) sometimes (50% of the time)
    5) usually (75% of the time)
    6) nearly always (over 90% of the time)

11. Do you feel that premature ejaculation (rapid climax) is a problem in your sexual relationship?

    1) yes
    2) no

12. How satisfied are you with the *variety of sexual activities* in your current sex life? (This includes the different types of kissing and caressing with a partner, different positions for intercourse, etc.)?

    1) extremely satisfied
    2) moderately satisfied
    3) slightly satisfied
    4) slightly *un*satisfied
    5) moderately *un*satisfied
    6) extremely *un*satisfied

13. Would you like your lovemaking to include *more*:

Breast caressing	1) yes	2) no
Hand caressing of your genital area	1) yes	2) no
Oral caressing (kissing) of your genital area	1) yes	2) no
Different positions for intercourse	1) yes	2) no

14. If you would like a certain kind of sexual caress or activity, which way do you *typically* let your partner know?

1) I wait to see if my partner will do what I like without my asking
2) I show my partner what I would like by moving their hand or changing my own position
3) I tell my partner exactly what I would like

15. How have you *typically* learned about your partner's sexual likes and dislikes?

1) From my partner telling me exactly what they want
2) From my partner moving my hand or changing their position to signal what they would like me to do
3) From watching my partner's reactions during sex
4) From intuition

16. When you have sex with your mate do you feel sexually aroused (e.g., feeling "turned on," pleasure, excitement)?

1) nearly always (over 90% of the time)
2) usually (about 75% of the time)
3) sometimes (about 50% of the time)
4) seldom (about 25% of the time)
5) never

17. When you have sex with your mate, do you have negative emotional reactions (e.g., fear, disgust, shame or guilt)?

1) never
2) rarely (less than 10% of the time)
3) seldom (less than 25% of the time
4) sometimes (50% of the time)
5) usually (75% of the time)
6) nearly always (over 90% of the time)

18. Does the male have any trouble getting an erection before intercourse begins?

1) never
2) rarely (less than 10% of the time)
3) seldom (less than 25% of the time)
4) sometimes (50% of the time)
5) usually (75% of the time)
6) nearly always (over 90% of the time)

19. Does the male have any trouble keeping an erection once intercourse has begun?

1) never
2) rarely (less than 10% of the time)
3) seldom (less than 25% of the time)
4) sometimes (50% of the time)
5) usually (75% of the time)
6) nearly always (over 90% of the time)

20. If the male loses an erection, when does that usually happen?

1) before penetrating to start intercourse
2) while trying to penetrate
3) after penetration, during the thrusting of intercourse
4) not applicable, losing erections is not a problem

21. What is the male's *typical* degree of erection during sexual activity?

1) 0 to 20% of a full erection
2) 20% to 40% of a full erection
3) 40% to 60% of a full erection
4) 60% to 80% of a full erection
5) 80% to 100% of a full erection

22. Does the male ejaculate (climax) without having a full, hard erection?

1) never
2) rarely (less than 10% of the time)
3) seldom (less than 25% of the time)
4) sometimes (50% of the time)
5) usually (75% of the time)
6) nearly always (over 90% of the time)

23. If you try, is it possible to reach orgasm (sensation of climax) through masturbation?

1) nearly always (over 90% of the time)
2) usually (about 75% of the time)
3) sometimes (about 50% of the time)
4) seldom (about 25% of the time)
5) never
6) have never tried to

24. If you try, is it possible for you to reach orgasm (sensation of climax) through having your genitals caressed by your mate?

1) nearly always (over 90% of the time)
2) usually (about 75% of the time)
3) sometimes (about 50% of the time)
4) seldom (about 25% of the time)
5) never
6) have never tried to

25. If you try, is it possible for you to reach orgasm (sensation of climax) through sexual intercourse?

1) nearly always (over 90% of the time)
2) usually (about 75% of the time)
3) sometimes (about 50% of the time)
4) seldom (about 25% of the time)
5) never
6) have never tried to

26. Can you reach orgasm (sensation of climax) through stimulation of your genitals by an electric vibrator or any other means (i.e., running water, rubbing with some object, etc.)?

1) nearly always (over 90% of the time)
2) usually (about 75% of the time)
3) sometimes (about 50% of the time)
4) seldom (about 25% of the time)
5) never
6) have never tried to

27. (*Women only*) Can you reach orgasm during sexual intercourse if, at the same time, your genitals are being caressed (by yourself or your mate with a vibrator, etc.)?

1) nearly always (over 90% of the time)
2) usually (about 75% of the time)
3) sometimes (about 50% of the time)
4) seldom (about 25% of the time)
5) never
6) have never tried to

28. Have you noticed a change in the intensity and pleasure of your orgasm?

1) much more intense and pleasurable than in the past
2) somewhat more intense and pleasurable than in the past
3) the same as in the past
4) somewhat less intense and pleasurable than in the past
5) much less intense and pleasurable than in the past

29. Is the female's vagina so "dry" or "tight" that intercourse cannot occur?

1) never
2) rarely (less than 10% of the time)
3) seldom (less than 25% of the time)
4) sometimes (50% of the time)
5) usually (75% of the time)
6) nearly always (over 90% of the time)

30. Do you feel pain in your genitals (sexual parts) during intercourse?

1) never
2) rarely (less than 10% of the time)
3) seldom (less than 25% of the time)
4) sometimes (50% of the time)
5) usually (75% of the time)
6) nearly always (over 90% of the time)

31. How often does pain (genital or nongenital) interfere with your ability to feel sexual pleasure?

1) never
2) rarely (less than 10% of the time)
3) seldom (less than 25% of the time)
4) sometimes (50% of the time)
5) usually (75% of the time)
6) nearly always (over 90% of the time)

32. Have you noticed a change in the sensitivity to touch of your genitals?

1) much more sensitive than in the past
2) somewhat more sensitive than in the past
3) about as sensitive as in the past
4) somewhat less sensitive than in the past
5) much less sensitive than in the past

33. *Overall*, how satisfactory to you is your sexual relationship with your mate?

1) extremely *un*satisfactory
2) moderately *un*satisfactory
3) slightly *un*satisfactory
4) slightly satisfactory
5) moderately satisfactory
6) extremely satisfactory

34. *Overall*, how satisfactory do you think your sexual relationship is to your mate?

1) extremely *un*satisfactory
2) moderately *un*satisfactory
3) slightly *un*satisfactory
4) slightly satisfactory
5) moderately satisfactory
6) extremely satisfactory

35. Do you feel that your partner plays a part in causing a problem in your sex life?

1) yes
2) no

36. If your lovemaking does not go well, how does your partner usually react?

1) accepting and understanding
2) frustrated or annoyed
3) anxious and blaming self
4) neutral or uncaring

37. (*Women only, men go on to Question 38*) When you have sex with your mate (including foreplay and intercourse) do you notice some of these things happening: your breathing and pulse speed up, wetness in your vagina, pleasurable sensations in your breasts and genitals?

1) nearly always (over 90% of the time)
2) usually (about 75% of the time)
3) sometimes (about 50% of the time)
4) seldom (about 25% of the time)
5) never
6) have never tried to

38. (*Men only*) How often do you wake from sleep with a firm erection (including times when you wake up needing to urinate)?

1) daily
2) 3–4 times a week
3) 1–2 times a week
4) once every 2 weeks
5) once a month
6) less than once a month
7) never

39. (*Men only*) How often do you wake from sleep with a partial (semisoft) erection?

1) daily
2) 3–4 times a week
3) 1–2 times a week
4) once every 2 weeks
5) once a month
6) less than once a month
7) never

40. (*Men only*) How often are you able to get and keep a firm erection in your own masturbation (self-touch in private)?

1) nearly always, over 90% of the time
2) usually, 75% of the time
3) sometimes, 50% of the time
4) seldom, less than 25% of the time
5) rarely, less than 10% of the time
6) never
7) have not tried masturbation in the past 6 months

41. (*Men only*) What is your *typical* degree of erection during masturbation (self-touch in private?

1) 0% to 20% of a full erection
2) 20% to 40% of a full erection
3) 40% to 60% of a full erection
4) 60% to 80% of a full erection
5) 80% to 100% of a full erection

42. (*Men only*) Do you feel your erect penis has an abnormal curve to it, or have you noticed a lump or "knot" on your penis?

1) yes
2) no

43. (*Men only*) Do you believe your penis is abnormally small?

1) yes
2) no

44. (*Men only*) How does the amount of ejaculate (liquid or semen) now compare to the amount you ejaculated in the past?

1) much greater than in the past
2) somewhat greater than in the past
3) about the same as in the past
4) somewhat less than in the past
5) much less than in the past
6) I do not know

45. (*Men only*) Do you ever have the sensation of orgasm (climax) without any ejaculation of fluid?

1) never
2) rarely, less than 10% of the time
3) seldom, less than 25% of the time
4) sometimes, about 50% of the time
5) usually, about 75% of the time
6) nearly always, over 90% of the time

46. (*Men only*) Do you ever have pain and/or burning during or after ejaculation?

1) never
2) rarely, less than 10% of the time
3) seldom, less than 25% of the time
4) sometimes, about 50% of the time
5) usually, about 75% of the time
6) nearly always, over 90% of the time
7) I do not ejaculate

The Vulvar Pain Assessment Questionnaire Inventory

Emma Dargie, *Queen's University*
Caroline F. Pukall,[6] *Queen's University*

The Vulvar Pain Assessment Questionnaire (VPAQ) Inventory is a disease-specific set of measurement scales designed to capture the biopsychosocial nature of chronic vulvar pain (CVP) (Bornstein et al., 2016; Dargie, Holden, & Pukall, 2016). These scales were designed to assess a broad range of symptoms, responses, and associated factors for use in clinical and research settings. Domains include pain quality, the temporal nature of the pain, associated symptoms, pain intensity, emotional/cognitive functioning, physical functioning, coping strategies, and interpersonal functioning.

Questions are divided into two categories: **core** questions central to the assessment and diagnosis of vulvar pain, and **supplemental** questions that provide additional information for diagnosis and treatment formulation (Figure 1).

Core Domains

The core domains of the VPAQ are available in two formats: a comprehensive (full) version (63 items), and an abbreviated screening version (38 items). We recommend administering the comprehensive version, though the screening version captures similar information when time is limited or as a follow-up.

The *Full Version* (VPAQfull) consists of 8 questions assessing onset, location, temporal pattern, degree of burning pain, and associated symptoms (e.g., itching) of vulvar pain, along with six subscales. These subscales consist of 55 items rated on 5-point scales with anchors tailored to the questions being asked.

The *Screening Version* (VPAQscreen) begins with the same 8 questions as the VPAQfull and assesses the same information as the VPAQfull with five subscales (30 items rated on 5-point scales as described above); the cognitive and emotional subscales are combined. Only the VPAQfull is presented in this publication, and Table 1 can be used to extract the VPAQscreen questions.

Supplemental Domains

The following scales can be administered in addition to the core domains, as needed.

The *Pain Descriptors Scale* (VPAQdesc) consists of three subscales and contains the most common words used

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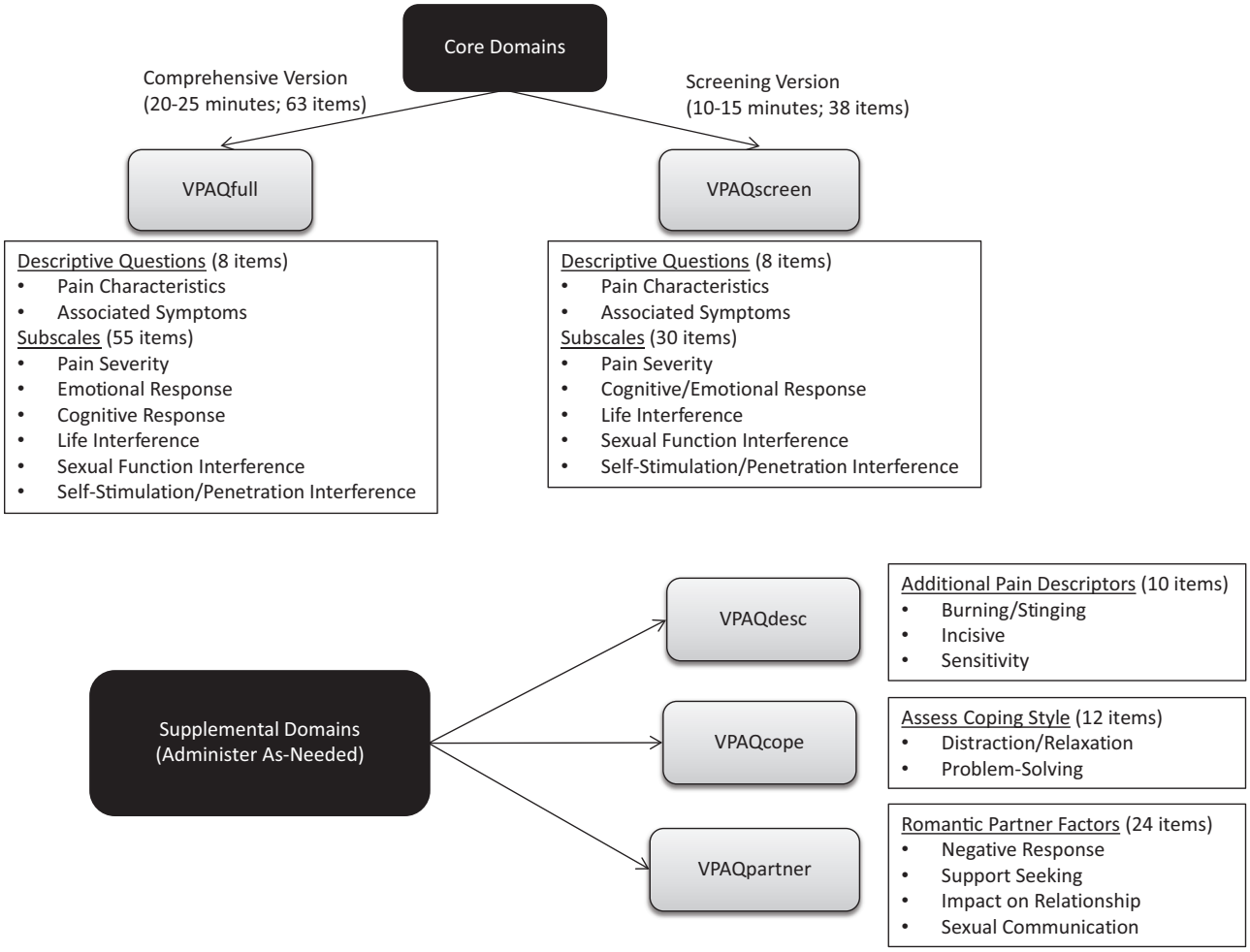

FIGURE 25.1
Core and Supplemental Domains of the Vulvar Pain Assessment Questionnaire Inventory.

TABLE 1
Items from the VPAQfull that Comprise the VPAQscreen

VPAQscreen	Items from VPAQfull
Categorical questions	1–8
Pain Severity	1, 3, 5
Cognitive/Emotional Response	1–6 (from Emotional Response subscale) 1–4 (from Cognitive Response subscale)
Life Interference	1–5, 11
Sexual Function Interference	1–6
Self-Stimulation/Penetration Interference	1–5

to describe CVP. These 10 items, rated on a scale from 0 (*Not at all*) to 4 (*Very much*), capture the degree to which each descriptor applies to their pain. The *Burning Pain* subscale is computed using Items 1 and 2, the *Incisive Pain* subscale is computed using items 3 and 4, and the *Sensitivity* subscale is computed using Items 5–10.

The *Coping Strategies Scale* (VPAQcope) addresses common coping strategies utilized by women with CVP. It consists of 12 items rated on a scale from 0 (*Never*) to 4 (*Always*), allowing participants to indicate the frequency with which they utilize such strategies. Items are grouped into two categories. The *Distraction/Relaxation-Based Strategies* subscale is computed using Items 1–6, and the *Active Problem-Solving Strategies* subscale is computed using Items 7–12.

The 24-item *Partner Factors Scale* (VPAQpartner) encompasses how romantic partners/spouses may be impacted by/respond to vulvar pain experienced by one partner, as perceived by the person with CVP. Each question is rated on a 5-point scale with anchors tailored to the questions. Four subscales can be calculated: the *Negative Partner Response* subscale is computed using Items 4–8, the *Supportive Response* subscale is computed using Items 1–3 and 9–12, the *Relationship Impact* subscale is computed using Items 13–18, and the *Sexual Communication Comfort* subscale is computed using Items 19–24.

Development

The construct validation approach guided the construction of the VPAQ (Simms & Watson, 2007), and a biopsychosocial framework was utilized alongside the recommendations of the Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials (IMMPACT) (Pukall et al., 2017; Turk et al., 2003) to generate categories of items that spanned the experience of CVP. Items were chosen based on a variety of sources, including the literature on vulvodynia and pain assessment, interviews used by our research group to screen and provisionally diagnose participants for research on vulvodynia, and websites geared towards the general public. Input on content and accessibility was solicited from members of our research group and others (two gynecologists, one anesthesiologist, one psychologist, and one patient).

The scale construction study was conducted online and included any person who self-reported experiencing CVP. This study was divided into two parts: one contained the item pool used for scale construction, and the second included previously researched questionnaires for establishing convergent and discriminant validity.

An iterative factor analysis approach was utilized to narrow down the number of items and establish subscales (see Dargie et al., 2016 for details). Two additional studies were conducted to further examine the psychometric properties of the scale (Dargie, Holden, & Pukall, 2017) and to explore its clinical utility (Dargie, Pukall, Goetsch, Stenson, & Leclair, 2018).

Response Mode and Timing

The VPAQfull takes 20–25 minutes to complete, while the VPAQscreen takes 10–15 minutes. Each supplemental scale takes 5–10 minutes. Respondents could complete the questionnaire in paper or electronic format.

Scoring

The eight categorical questions of the VPAQscreen and VPAQfull can be utilized to describe respondents' pain based on onset, location, temporal pattern, degree of burning pain, and associated symptoms (e.g., itching). These questions are particularly useful for ruling out other vulvar pain conditions and describing sample characteristics. The remaining questions, answered on 5-point scales (coded from 0 to 4), are used to calculate subscale scores by taking the average of the items that comprise each subscale. We suggest that a mean score greater than or equal to 2.0 indicates clinical significance. For the interference subscales on the VPAQfull and VPAQscreen, two additional response options are suggested: "not applicable" and "I avoid because of pain. Where a "not applicable" option is provided, we recommend coding that response as "0" and "I avoid because of pain" should be coded as a "4" to reflect significant interference with that activity.

Reliability

When examining the internal consistency of the subscales, adequate to good reliability was established: Cronbach's $\alpha > .69$ for all but one subscale. The *Burning/Stinging* subscale of the VPAQdesc had an α of .63 (Dargie et al., 2016) and .56 (Dargie et al., 2017), likely because this subscale contains only two items. Most subscales had $\alpha > .75$ for both studies. Furthermore, 4-week test–retest reliability (Dargie et al., 2017) was moderate to strong for all subscales, rs > .49, with most subscales > .70. Exploratory Structural Equation Modeling indicated that all items loaded significantly on the original factors, and that all but one subscale (VPAQcope) had adequate model fit (Dargie et al., 2017).

Validity

The VPAQ subscales converge with similar measures and are less related to measures targeting different information (e.g., the *Sexual Functioning* subscale of the VPAQfull is strongly related to scores on the Female Sexual Function Index (Rosen, Brown, Heiman, Leiblum, & Meston, 2000) but weakly related to scores on the Dyadic Adjustment Scale (Spanier, 1976), thus providing evidence of construct, convergent, and discriminant validity (Dargie et al., 2016). We also conducted one pilot study on the clinical utility of the VPAQ: it was helpful for diagnosis and accurately captured symptoms experienced by patients of a vulvar pain clinic (Dargie et al., 2019).

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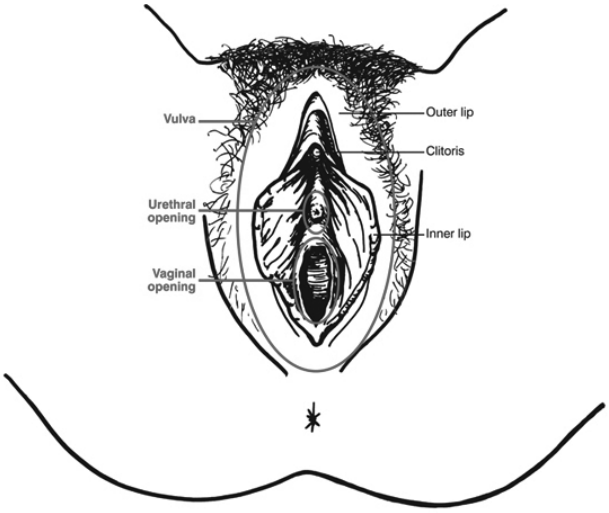
Exhibit

Vulvar Pain Assessment Questionnaire

1. Please reference the diagram below. Where do you experience chronic vulvar/genital pain? Select all that apply

   ☐ Clitoris
   ☐ Urethral Opening
   ☐ Vulva
   ☐ Vaginal Opening/Vestibule



2. Do you experience vulvar skin symptoms such as:

	Yes	No
Itching	○	○
Fissures/splits/tears	○	○
Dryness	○	○

3. If you have looked at your vulva, have you noted that the appearance has changed?

   ○ Yes
   ○ No
   ○ I have not looked to note any changes

4. If you have vaginal discharge, do you believe that it contributes to your pain problem?

   ○ Yes
   ○ Maybe
   ○ No
   ○ No discharge

5. How long ago did your vulvar pain develop?

   ○ < 6 months ago
   ○ 7 months–2 years
   ○ 3–5 years
   ○ 6–10 years
   ○ 10+ years

6. When do you experience pain?

   ○ Any time throughout the day
   ○ During non-sexual contact with your vulva
   ○ During sexual activity involving contact with your vulva
   ○ Other _____

7. Please choose the option that best describes when your pain begins or worsens during vulvar contact/penetration

   ○ When any contact is made with the vulva
   ○ When the finger/object/penis starts to enter the vagina
   ○ When the finger/object/penis has fully entered and is thrusting
   ○ When a male partner ejaculates in the vagina without wearing a condom
   ○ Only after penetration has ended
   ○ When the finger/object/penis is removed
   ○ My pain level does not change during vulvar contact/penetration

8. How well does the word *burning* describe how your vulvar pain typically feels?

   ○ Not at all
   ○ A little
   ○ Somewhat
   ○ Mostly
   ○ Very much

Pain Severity

Please rate the following about your vulvar pain (in a typical month)

	None	Mild	Moderate	Severe	Worst Possible
Intensity: How Strong the Pain Sensation Is					
1. Average pain intensity.	○	○	○	○	○
2. Worst pain intensity.	○	○	○	○	○
Unpleasantness: How Much the Pain Bothers You					
3. Average pain unpleasantness.	○	○	○	○	○
4. Worst pain unpleasantness.	○	○	○	○	○
Distress: How Upset the Pain Makes You Feel					
5. Average distress about pain.	○	○	○	○	○
6. Worst distress about pain.	○	○	○	○	○

Emotional Response

In the past 6 months, how much do you experience **feeling** the following related to your vulvar pain?

	Not at all	A little	Somewhat	A lot	Very much
1. Sad.	○	○	○	○	○
2. Unable to make changes in my life.	○	○	○	○	○
3. Bad about myself because of the pain.	○	○	○	○	○
4. Emotionally exhausted because of the pain.	○	○	○	○	○
5. Anger towards my pain.	○	○	○	○	○
6. Depressed.	○	○	○	○	○

7. That the pain will never stop.	○	○	○	○	○
8. Like my body has let me down.	○	○	○	○	○
9. Physically tense.	○	○	○	○	○
10. Like giving up.	○	○	○	○	○
11. That I am not a worthwhile person.	○	○	○	○	○
12. Distracted.	○	○	○	○	○
13. Hateful things about myself as a person.	○	○	○	○	○
14. Stressed about the pain.	○	○	○	○	○
15. That it is unfair that I have pain.	○	○	○	○	○

Cognitive Response

In the past 6 months, how much do you experience *thinking/worrying* about the following related to your vulvar pain?

	Not at all	A little	Somewhat	A lot	Very much
1. That people might think I am a bad sexual partner.	○	○	○	○	○
2. That my partner(s) might think I am frigid (i.e. sexually unresponsive).	○	○	○	○	○
3. That my partner(s) will leave me.	○	○	○	○	○
4. That people (would) think less of me because of my pain.	○	○	○	○	○
5. That other people are better sexual partners than me.	○	○	○	○	○
6. That I am a bad sexual partner.	○	○	○	○	○
7. That I will not be able to find [a] future partner(s).	○	○	○	○	○
8. That my pelvic muscles will be too tight.	○	○	○	○	○

Life Interference

How much does your vulvar pain negatively interfere with the following?

	Not at all	A Little	Somewhat	A Lot	Very Much	I avoid because of pain
1. Sitting.	○	○	○	○	○	○
2. Walking.	○	○	○	○	○	○
3. Wearing tight-fitting clothing.	○	○	○	○	○	○
4. Taking part in recreational activities.	○	○	○	○	○	○
5. Ability to work.	○	○	○	○	○	○
6. Going out with friends.	○	○	○	○	○	○
7. Fulfilling responsibilities to your family.	○	○	○	○	○	○
8. Ability to perform tasks at work.	○	○	○	○	○	○
9. Activities involving direct or indirect pressure (e.g. bike riding).	○	○	○	○	○	○
10. Using sanitary pads.	○	○	○	○	○	○
11. Ability to fall asleep.	○	○	○	○	○	○

Sexual Function Interference

How much does your vulvar pain negatively interfere with the following?

	Not at all	A Little	Somewhat	A Lot	Very Much	I avoid because of pain
1. My response to sexual advances made by my partner.	○	○	○	○	○	○
2. Desire for sexual activity.	○	○	○	○	○	○

3. Feeling sexual pleasure.	○	○	○	○	○	○
4. Orgasm frequency.	○	○	○	○	○	○
5. Taking part in non-penetrative sexual activity.	○	○	○	○	○	○
6. Taking part in penetrative sexual activity.	○	○	○	○	○	○
7. Worrying about sexual satisfaction no longer being possible.	○	○	○	○	○	○
8. Worrying that any sensation in your genitals will lead to pain.	○	○	○	○	○	○
9. Taking off your clothes around your partner.	○	○	○	○	○	○
10. Worrying about the next time your partner(s) will want sexual activity.	○	○	○	○	○	○

Self-Stimulation/Penetration Interference

How often do the following situations/activities cause vulvar pain?

	Never	Rarely	Sometimes	Often	Always	I avoid because of pain
1. Using tampons.	○	○	○	○	○	○
2. Solitary sexual stimulation of my vulva (i.e. masturbation).	○	○	○	○	○	○
3. Masturbation when partner is present.	○	○	○	○	○	○
4. Self penetration with fingers (partner absent).	○	○	○	○	○	○
5. Self penetration with sex toy (partner absent).	○	○	○	○	○	○

Pain Descriptors (VPAQdesc)

When you experience vulvar pain, how well do the following words describe how your pain typically feels?

	Not at all	A Little	Somewhat	A Lot	Very Much
1. Burning	○	○	○	○	○
2. Stinging	○	○	○	○	○
3. Sharp	○	○	○	○	○
4. Stabbing	○	○	○	○	○
5. Aching	○	○	○	○	○
6. Irritating	○	○	○	○	○
7. Raw	○	○	○	○	○
8. Sensitive	○	○	○	○	○
9. Tender	○	○	○	○	○
10. Sore	○	○	○	○	○

Coping Strategies (VPAQcope)

To cope with my vulvar pain, I

	Never	Rarely	Sometimes	Often	Always
1. Relax my body.	○	○	○	○	○
2. Breathe deeply.	○	○	○	○	○
3. Go to my "happy place."	○	○	○	○	○
4. Practice yoga/stretching.	○	○	○	○	○
5. Do something that takes my mind off the pain.	○	○	○	○	○
6. Focus on staying optimistic.	○	○	○	○	○
7. Visit my doctor(s).	○	○	○	○	○
8. Look for information on my pain.	○	○	○	○	○
9. Use prescription medication.	○	○	○	○	○

10. Talk to people in my social network.	○	○	○	○	○
11. Talk to others with similar pain.	○	○	○	○	○
12. Avoid anything that might cause pain.	○	○	○	○	○

Partner Factors (VPAQpartner)

How does your romantic partner/spouse respond to your vulvar pain?

	Never	Rarely	Sometimes	Often	Always
1. Asks what s/he can do.	○	○	○	○	○
2. Wants to talk about it.	○	○	○	○	○
3. Tries to acknowledge my pain.	○	○	○	○	○
4. Gets angry.	○	○	○	○	○
5. Blames me.	○	○	○	○	○
6. Appears frustrated.	○	○	○	○	○
7. Is visibly upset.	○	○	○	○	○
8. Looks sad.	○	○	○	○	○

How do you interact with your romantic partner/spouse when you are in pain?

	Never	Rarely	Sometimes	Often	Always
9. Seek emotional support.	○	○	○	○	○
10. Seek physical comfort.	○	○	○	○	○
11. Share your feelings.	○	○	○	○	○
12. Problem solve.	○	○	○	○	○

How has your vulvar pain impacted the following in your romantic relationship?

	Much Worse	Somewhat Worse	No Change	Somewhat Better	Much Better
13. Physical intimacy.	○	○	○	○	○
14. Emotional intimacy.	○	○	○	○	○
15. Sexual intimacy.	○	○	○	○	○
16. Relationship quality.	○	○	○	○	○
17. General communication.	○	○	○	○	○
18. Sexual communication.	○	○	○	○	○

How comfortable do you feel communicating (verbally or non-verbally) with your romantic partner/spouse about the following when experiencing vulvar pain?

	Largely Uncomfortable	Somewhat Uncomfortable	Neither Comfortable or Uncomfortable	Somewhat Comfortable	Largely Comfortable
19. Sexual desire.	○	○	○	○	○
20. Frequency of activity.	○	○	○	○	○
21. Amount of foreplay.	○	○	○	○	○
22. Duration of activity.	○	○	○	○	○
23. Sexual position.	○	○	○	○	○
24. Technique.	○	○	○	○	○

Female Sexual Distress Scale—Revised

Leonard R. Derogatis,[7] *Maryland Center for Sexual Health*

The Female Sexual Distress Scale—Revised (FSDS-R) is a self-administered questionnaire designed to assess distress related to sexual dysfunction in women with Hypoactive Sexual Desire Disorder (HSDD), and other sexual dysfunctions.

The FSDS-R consists of 13 items that relate to different aspects of sex-related personal distress in women. Responses are based on the frequency with which each problem has bothered the subject or caused them distress within different recall periods (past 7 or 30 days).

The FSDS-R is an extended version of the 12-item Female Sexual Distress Scale (FSDS; Derogatis, Rosen, Leiblum, Burnett, & Heiman, 2002). The FSDS-R includes an additional question (Item 13) that specifically assesses distress related to low sexual desire. The FSDS-R is for use in both pre- and postmenopausal women.

Development

The FSDS was developed by a national group of experts in human sexuality under the auspices of the American Foundation for Urologic Disease (AFUD).

Response Mode

Respondents read a list of feelings and problems that women sometimes have concerning their sexuality and circled the number that best describes how often that problem has bothered them or caused them distress during the past 30 days. They are provided with an example before completing the questionnaire and are free to ask any questions they may have.

Scoring

All items are rated in terms of the frequency with which that problem has bothered the individual or caused her distress in the past 30 days. Respondents rate every item from 0 to 4: 0 (*Never*), 1 (*Rarely*), 2 (*Occasionally*), 3 (*Frequently*), or 4 (*Always*). The total score ranges from 0 to 52, with higher scores indicating more distress. A total score of ≥ 11 or more indicates a clinical level of sexual distress.

Reliability

The FSDS was tested for reliability and validity in three studies involving over 500 women with and without sexual dysfunction (Derogatis et al., 2002). The reliability and the validity of the FSDS-R were established in a multicenter, 4-week, nontreatment study, conducted in adult North American women with generalized acquired HSDD ($n = 136$), other Female Sexual Dysfunction (FSD; Female Sexual Arousal Disorder [FSAD] or Female Orgasmic Disorder [FOD], $n = 48$); or no FSD ($n = 75$; Derogatis, Clayton, Lewis-D'Agostino, Wunderlich, & Fu, 2008).

Cronbach's coefficient alpha was used to measure the internal consistency of the FSDS-R. Cronbach's alpha was > .88 for subjects with HSDD, other FSD, and no FSD on days 0, 7, and 28 (Derogatis, Clayton et al., 2008).

Intraclass correlation coefficient (ICC) was used to estimate test–retest reliability. For all subjects, the ICC for the FSDS-R total and Item 13 scores between days 0 and 28 were .88 and .83, respectively (Derogatis, Clayton et al., 2008). A version that was identical except for using 7-day recall gave equivalent results to the standard 30-day recall version in reliability.

Validity

In the validation study, mean total FSDS, FSDS-R, and FSDS-R Item 13 scores were all significantly higher in women with HSDD or other FSD than in women with no FSD ($p < .001$ at all time points), demonstrating that all these tests had discriminant validity (Derogatis, Clayton et al., 2008). Receiver operating characteristic analyses of FSDS and FSDS-R total scores confirmed these findings (Derogatis, Clayton et al., 2008). A version that was identical except for using 7-day recall gave equivalent results to the standard 30-day recall version in discriminant validity.

The content validity (relevance, clarity, and comprehensiveness) of the FSDS-R (7-day recall version) and the potential of Item 13 (bothered by low sexual desire) as a stand-alone measure of distress associated with decreased sexual desire were assessed through saturation interviewing in women with generalized acquired HSDD in a multicenter, single-visit study conducted in the U.S. (Derogatis, Pyke, McCormack, Hunter, & Harding, 2008). Saturation was reached (i.e., no new information obtained) with 25 subjects. Subjects completed the FSDS-R prior to undergoing cognitive debriefing to capture information on their perceptions of the instrument. Subjects rated the relevancy of every item in the FSDS-R from 0 (*Not at all Relevant*) to 4 (*Extremely Relevant*). Item 13 (bothered by low sexual desire) was rated as the most relevant item, with a mean rating of 3.33. The majority of participants found every item clear and easy to understand; the percentage of respondents answering "Yes" to the question "Was this item clear and easy to understand?" was 76 percent for Item 9 (regrets about your sexuality), 80 percent for Item 8 (sexually inadequate) and 88–100 percent for the remaining items. Item 13 alone demonstrated good content validity and 56 percent of respondents felt that it covered all of their feelings about their decreased sexual desire.

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Exhibit

Female Sexual Distress Scale-Revised

Below is a list of feelings and problems that women sometimes have concerning their sexuality. Please read each item carefully, and select the response that best describes *how often that problem has bothered you or caused you distress during the past 30 days including today*. Select only one number for each item, and take care not to skip any items. If you change your mind, change your first response carefully. Read the example before beginning, and if you have any questions please ask about them.

	0 Never	1 Rarely	2 Occasionally	3 Frequently	4 Always
1. Distressed about your sex life.	○	○	○	○	○
2. Unhappy about your sexual relationship.	○	○	○	○	○
3. Guilty about sexual difficulties.	○	○	○	○	○
4. Frustrated by your sexual problems.	○	○	○	○	○
5. Stressed about sex.	○	○	○	○	○
6. Inferior because of sexual problems.	○	○	○	○	○
7. Worried about sex.	○	○	○	○	○
8. Sexually inadequate.	○	○	○	○	○
9. Regrets about your sexuality.	○	○	○	○	○
10. Embarrassed about sexual problems.	○	○	○	○	○
11. Dissatisfied with your sex life.	○	○	○	○	○
12. Angry about your sex life.	○	○	○	○	○
13. Bothered by low sexual desire.	○	○	○	○	○

Sexual Self-Efficacy Scale—Erectile Functioning

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The Sexual Self Efficacy Scale—Erectile Functioning (SSES-E; Libman, Rothenberg, Fichten, & Amsel, 1985) is a brief self-report measure of the cognitive dimension of erectile functioning and adjustment in men. It evaluates a man's beliefs about his sexual and erectile competence in a variety of situations. The scale may be completed by a man to obtain self-ratings or by his partner to obtain corroboration. Self-efficacy refers to confidence in the belief that one

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can perform a certain task or behave adequately in a given situation (Bandura, 1982). Sexual self-efficacy is of great concern to most men and a topic of increasing interest with an aging population.

Development

Item content of the 25 item SSES-E is based on questionnaires by Lobitz and Baker (1979) and Reynolds (1978).

Response Mode and Timing

The respondent places a check mark in the "Can Do" column next to each sexual activity which he expects he could do if he tried it today. For each activity checked, he also selects a number from 10 to 100 indicating "Confidence" in his ability to perform the activity. The reference scale labels a confidence rating of 10 as *Quite Uncertain*, a rating of 50–60 as *Moderately Certain*, and a rating of 100 as *Quite Certain*. To obtain both partners' views about a man's self-efficacy beliefs, the SSES-E can be completed by both the male subject and his partner. Partners rate the male subject's sexual functioning according to the same format. This takes 10 minutes.

Scoring

The SSES-E yields a self-efficacy Strength score obtained by summing the values in the Confidence column and dividing by 25 (the number of activities rated). Any activity not checked in the Can Do column is presumed to have a 0 Confidence (i.e., Strength) rating. Some are reluctant to use the 10-point interval, so any continuous number recorded may be used in the Confidence column. Higher scores indicate greater confidence in the man's erectile competence. In case of missing scores, prorating is possible. There must, however, be at least one response in either the Can Do or the Confidence column on Items 14–25. To deal with missing data, if Can Do is checked and Confidence is left empty, mean score substitution can be used when this occurs fewer than three times. If it occurs more often, the test is invalid.

Reliability

Dysfunctional and control samples were examined. The dysfunctional sample consisted of 17 men presenting with sexual difficulties (13 with Erectile Disorder, 2 with Hypoactive Sexual Desire, 2 with Rapid Ejaculation) at a sex therapy service (Libman et al., 1985). Nine men presented with their female sexual partners. The control group consisted of 15 married couples with non-problematic sexual functioning matched to the dysfunctional group on demographic variables. The entire sample was composed of middle-class Caucasians, with a mean age of 34. Test–retest reliability, using the control group, was calculated over a one month period. Results showed a reliability coefficient of .98 for males and .97 for partners.

To determine internal consistency, standardized alpha coefficients were calculated for the dysfunctional and control males and females separately. The following estimates were obtained: .92 for dysfunctional males and .94 for their female partners' ratings of their male partners, .92 for control males and .86 for their female partners. In a Portuguese version (N = 138 men, age range 18–62), the Cronbach's alpha was similar to the original Canadian sample (Rodrigues Jr., Catão, Finotelli Jr., Silva, & Viviani, 2008), and in a recent Iranian version involving 115 married men, the Cronbach's alpha was .95 (Rajabi, Dastan, & Shahbazi, 2012).

Validity

Concurrent validity estimates were reported in the original study (Libman et al., 1985). More recently, Latini et al. (2002) correlated men's SSES-E and Psychological Impact of Erectile Dysfunction Scale (PIED) scores. The SSES-E was significantly correlated with both PIED scales (–.57 and –.51).

Convergent validity was also established by Swindle, Cameron, Lockhart, and Rosen (2004), who found a correlation of .67 between SSES-E and Psychological and Interpersonal Relationship Scales scores. Reissing, Andruff, and Wentland (2012) found that lower SSES-E score was related to lower level of sexual adjustment (r = .49) and higher sexual aversion (r = –.33) in 170 young men aged 18 to 29.

Predictive validity was shown by Kalogeropoulos (1991), who found that SSES-E scores significantly improved in a sample of 53 males who had undergone vasoactive intracavernous pharmacotherapy for erectile dysfunction. Similarly, Latini, Penson, Wallace, Lubeck, and Lue's (2006b) longitudinal study of therapy for erectile dysfunction showed that treatment had an important and significant effect on SSES-E scores. Godschalk et al. (2003) used low dose human chorionic gonadotropin and placebo in the treatment of benign prostatic hyperplasia. In addition to improvement in urine flow, the authors showed improved SSES-E after treatment relative to placebo subjects (p < .036). Similarly, Zafarghandi, Nik, Birashk, Assari, and Khanehkeshi (2016) showed that not only did aspects of sexual functioning improve among men with opiate dependence who underwent methadone maintenance therapy, but also that SSES-E scores improved significantly. In a study of Iranian substance addicted couples, results show that after a 9-week therapy program, SSES-E scores of treated men were significantly higher than those of the control group (Nooripour, Bass, & Apsche, 2013; Nooripour et al., 2014).

The SSES-E has also demonstrated good criterion validity. For example, Latini, Penson, Wallace, Lubeck, and Lue (2006a) found that SSES-E score was the best predictor of erectile dysfunction severity out of a large

number of clinical and psychosocial predictors. In addition, Reissing et al. (2012) found that in a sample of 170 men aged 18–29, SSES-E scores not only significantly contributed to variance in sexual adjustment but also that these mediated the relationship between affective reaction to first intercourse and current sexual adjustment.

Evidence for known-groups criterion validity has also been collected. In our initial sample of 17 dysfunctional men and 15 controls (Libman et al., 1985), dysfunctional men and their partners scored significantly lower on the SSES-E than did functional men and their partners. Moreover, a stepwise discriminant analysis indicated that SSES-E scores were able to classify dysfunctional and non-dysfunctional men with 88 percent accuracy. In addition, older married men had significantly lower self-efficacy scores than their middle aged counterparts (Libman et al., 1989). Also, men who underwent a transurethral prostatectomy rated their post-surgery SSES-E lower than their pre-surgery score (Libman et al., 1989, 1991). In addition, Latini et al. (2006a) found that men with mild, moderate and severe erectile dysfunction differed significantly. The findings above were replicated in studies of men with erectile dysfunction who had illness known to affect erectile functioning (Penson et al., 2003a, 2003b). In a study of 138 Brazilian men, results show that, as expected, men with erectile problems had significantly higher SSES-E scores that those with rapid ejaculation (Rodrigues Jr. et al., 2008).

These results indicate that the SSES-E has excellent psychometric properties. The measure has good internal consistency and test–retest reliability as well as good concurrent, convergent, criterion, and predictive validity. Moreover, the measure has been successfully used in studies of psychological and medical interventions for men with erectile difficulties caused by known disease processes as well as erectile dysfunction of unknown etiology.

Other Information

Originally developed in English and French, Glaxo SmithKline (2009) had the measure translated into several languages (cf. Eremenco, 2003) and used it in its worldwide Levitra evaluation program. Since that time, a Portuguese version (Rodrigues Jr. et al., 2008) and a version for use in Iran (Rajabi et al., 2012) have been developed.

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Exhibit

Sexual Self-Efficacy Scale—Erectile Functioning

The following form lists sexual activities that men engage in.

For male respondents only

Under column I (*Can do*), check the activities that *you expect you could do* if you were asked to do them today.

For only those activities you checked in column I, rate your *degree of confidence* in being able to perform them by selecting from 10 to 100 using the scale below. Each activity is independent of the others. Write this number in column II (*Confidence*).

Remember, check what you *can do*. Then, rate your *confidence* in being able to do each activity if you tried to do it today. Each activity is independent of the others.

For partner respondents only

Under column I (*Can do*), check the activities that you think *your male partner could do* if he were asked to do them today.

For only those activities you checked in column I, rate your *degree of confidence* that your male partner could do them by selecting from 10 to 100 using the scale below. Each activity is independent of the others. Write this number in column II (*Confidence*).

Remember, check what you expect your male partner *can do*. Then, rate your *confidence* in your partner's ability to do each activity if you tried to do it today. Each activity is independent of the others.

	I	II
	Check if Male Can Do	Rate Confidence (10–100)
10 20 30 40 50 60 70 80 90 100 Quite Uncertain — Moderately Certain — Quite Certain		
1. Anticipate (think about) having intercourse without fear or anxiety.	○	___
2. Get an erection by masturbating when alone.	○	___
3. Get an erection during foreplay when both partners are clothed.	○	___
4. Get an erection during foreplay while both partners are naked.	○	___
5. Regain an erection if it is lost during foreplay.	○	___
6. Get an erection sufficient to begin intercourse.	○	___
7. Keep an erection during intercourse until orgasm is reached.	○	___
8. Regain an erection if it is lost during intercourse.	○	___
9. Get an erection sufficient for intercourse within a reasonable period of time.	○	___
10. Engage in intercourse for as long as desired without ejaculating.	○	___
11. Stimulate the partner to orgasm by means other than intercourse.	○	___
12. Feel sexually desirable to the partner.	○	___
13. Feel comfortable about one's sexuality.	○	___
14. Enjoy a sexual encounter with the partner without having intercourse.	○	___
15. Anticipate a sexual encounter without feeling obliged to have intercourse.	○	___
16. Be interested in sex.	○	___
17. Initiate sexual activities.	○	___

18.	Refuse a sexual advance by the partner.	○	___
19.	Ask the partner to provide the type and amount of sexual stimulation needed.	○	___
20.	Get at least a partial erection when with the partner.	○	___
21.	Get a firm erection when with the partner.	○	___
22.	Have an orgasm while the partner is stimulating the penis with hand or mouth.	○	___
23.	Have an orgasm while penetrating (whether there is a firm erection or not).	○	___
24.	Have an orgasm by masturbation when alone (whether there is a firm erection or not).	○	___
25.	Get a morning erection.	○	___

The SexFlex Scale

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The 6-item SexFlex scale (Gauvin & Pukall, 2018) is a measure of people's flexibility in changing their sexual approach—or "sexual script"—when they encounter a sexual issue. Examples of sexual issues include different sexual preferences or differing levels of sexual desire between partners, roadblocks in sexual communication, navigating sexual activity in the presence of genital pain or arousal difficulties, dealing with performance anxiety, and dissatisfaction with the timing of one's—or one's partner's—orgasm.

Development

The two authors generated an initial pool of 13 items, inspired from themes that emerged from the sexual scripts literature and components of the Coping Flexibility Scale (Kato, 2012). These initial 13 items were administered, as a part of a larger survey (Gauvin & Pukall, 2018), to an online sample (N = 951) of individuals in same-gender and mixed-gender relationships (n = 118 males with a male partner, n = 236 males with a female partner, n = 485 females with a male partner, n = 112 females with a female partner). Individuals were randomly assigned using SPSS 23.0 to one of two subsamples; subsample A for exploratory factor analysis (n = 483) or subsample B for confirmatory factor analysis (n = 468).

Using data from subsample A (n = 483), both the minimum average partial (MAP) test and parallel analyses indicated that a two-factor solution was appropriate: Approach Flexibility and Reflective Flexibility. Three items were removed prior to initial confirmatory factor analysis based on the criteria of cross loadings greater than |0.3|. The two-factor solution remained robust across rotations.

Data from subsample B (n = 468) were subjected to a confirmatory factor analysis using maximal likelihood method with the lavaan package (Rosseel, 2012) in R 3.3.0. The two-factor SexFlex scale had adequate model fit (RMSEA = .073, SRMR = .052, CFI = .96), and a structure that was invariant across females and males in same and mixed-gender relationships.

As the Reflective Flexibility subscale showed inadequate reliability and validity in subsequent studies, a final single factor solution was retained (SRMR = .025, CFI = .098, RMSEA = .078), resulting in a final 6-item scale.

Response Mode and Timing

The measure can be completed electronically or using paper-and-pencil in under 5 minutes. Participants indicate on a 4-point Likert-type scale, from *seldom or never* to *almost always*, the point that reflects how frequently they respond in the way indicated by the item. The items were worded to reflect a person's sexual flexibility during partnered sexual activity.

Scoring

A total score on the SexFlex scale is obtained by summing the 6 items. No items are reverse coded and higher scores indicate a greater frequency of flexible responses when dealing with a sexual issue.

Reliability

The SexFlex shows a consistent high internal consistency, with Cronbach's alpha values ranging from .86 to 90 across

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male and female-identified individuals in same-gender and mixed-gender relationships. Test–retest reliability computed after a 16-week period (Study 3, $N = 96$) with the same sexual partner was moderate ($r = .76$).

Validity

Convergent validity was examined (Study 2, $N = 125$) by comparing the SexFlex to measures of sexual well-being, and the relative level of sexual rewards to costs, sexual satisfaction, and sexual distress (Gauvin & Pukall, 2018).

Scores on the SexFlex scale were moderately correlated to the relative level of sexual rewards to costs ($r = .41$), sexual satisfaction ($r = .44$), and sexual distress ($r = –.53$). Discriminant validity was determined by comparing the SexFlex scale to sleep quality ($r = .004$) and perceived stress ($r = –.24$).

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Exhibit

The SexFlex Scale

Thinking about when you experience a sexual challenge (which includes different sexual preferences than your partner, sexual communication, sexual desire, sexual pain, performance anxiety, arousal difficulties, orgasming too slow or too quick, etc.), select the point that reflects how frequently you respond in the way indicated.

When confronted with my sexual difficulty …

	1 Seldom or never	2 Sometimes	3 Often	4 Almost always
1. I can easily change my approach to sex if necessary because of my sexual problem(s).	○	○	○	○
2. I think of different options for sex when my normal sexual routine is not successful because of my sexual problem(s).	○	○	○	○
3. I immediately change my approach to sex if a certain approach doesn't work.	○	○	○	○
4. I adjust my strategy for coping with my sexual problem as soon as I notice that my approach fails.	○	○	○	○
5. I am flexible in my approach towards sex.	○	○	○	○
6. I easily think of a different approach to my sex that suits my changing sexual situation.	○	○	○	○

Gay Male Sexual Difficulties Scale

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The Gay Male Sexual Difficulties Scale (GMSDS; McDonagh, Stewart, Morrison, & Morrison, 2016) measures disturbances in "normal" sexual responding and reduced sexual function in gay men. "Normal" refers to what is considered normal for that person and can vary from individual to individual.

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Description

One hundred and fifty items were generated following an extensive review of sexual functioning literature (McDonagh, Bishop, Brockman, & Morrison, 2014) and a series of personal interviews and focus groups with 52 men (McDonagh, Nielsen, McDermott, Davies, & Morrison, 2017). The latter facilitated the emergence of novel constructs (e.g., difficulties associated with a tight foreskin). Items for the GMSDS were (1) worded to take gay men's sexual behaviours into account (e.g., rimming); (2) designed to be appropriate for respondents with varying levels of sexual experience; and (3) multifaceted (i.e., accounted for sexual difficulties in a variety of contexts). A panel of content experts (i.e., individuals that had published in the field of psychometrics and LGBT research) and lay experts (i.e., potential research participants) assessed the items on dimensions such as clarity and comprehensiveness. Two item pools were generated: the first measuring physical sexual difficulties and the second measuring psychological sexual difficulties. The combined item pool consisted of 143 questions representing several domains of sexual difficulties.

The dimensionality was assessed in two studies composed of three samples of gay men. Study 1 was an Exploratory Factors Analysis (EFA) and Study 2 was a Confirmatory Factor Analysis (CFA) with two samples (Data Sets A and B; McDonagh et al., 2016).

The EFA sample consisted of 1022 "exclusively gay" men (age range = 18–79 years, $M = 34.55$, $SD = 11.87$), most of whom were Caucasian (86%) and sampled from either North America (53%) or Europe (34%). EFA was conducted using principal axis factoring with oblique rotation. Decisions regarding the number of factors to retain were based on a parallel analysis and a scree plot. For the purpose of retaining items, the minimal acceptable factor loading was .50, with no cross-loadings great than .32.

Forty-seven items were retained. Parallel analysis suggested that a six-factor solution was appropriate. Inspection of the items' loadings on each factor suggested that they measure difficulties with receptive anal intercourse (RAD; eigenvalue = 9.03); erectile difficulties (ED; eigenvalue = 4.94); seminal fluid concerns (SFC; eigenvalue = 4.10); difficulties with insertive anal intercourse (IAD; eigenvalue = 3.93); foreskin difficulties (FD; eigenvalue = 3.23); and body embarrassment (BE; eigenvalue = 3.09). The average factor loadings were .66 (RAD), .77 (ED), .73 (SFC), .68 (IAD), .87 (FD), and .79 (BE), respectively, which reflects a high degree of correlation between test items and their corresponding factors.

Two samples, Data Set A ($N = 562$) and Data Set B ($N = 562$), were subjected to CFA (McDonagh et al., 2016). Participants were exclusively gay men, most of whom resided in North America or Europe. The average age of participants was 34 years ($SD = 11.6$) The 47 GMSDS items were included in a first-order measurement model. Then, to examine if the six constructs represented by each subscale were accounted for in overall sexual difficulties (OSD), a higher-order CFA was performed.

Model fit was assessed using multiple criteria: chi-square/df ratio (Q); Root Mean Square Error of Approximation (RMSEA); and Bentler's comparative fit index (CFI). Excellent fit was denoted when $Q < 2$, RMSEA $\leq .06$, and CFI $\geq .95$. Finally, item redundancy was assessed by examining modification indices and regression weights of item pairs.

Data Set A

First-Order Model Fit

The original 47-item GMSDS did not possess adequate model fit. After inspecting modification indices and item cross-loadings, 22 items were removed. The resultant 25-item model was retested; however, the fit statistics remained suboptimal. The modification indices suggested that the error terms for four pairs of items should be covaried. As these items appeared to be thematically related, the addition of covariances was reasonable. Fit statistics for the 25-item model, with four covariances, were excellent: $Q = 1.94$; RMSEA = .041; 90% CI [.036, .046]; CFI = .97; and AIC = 634.96. All of the subscales were weakly positively correlated (rs = .09–.38, ps < .05), except for the ED and IAD, and ED and FD (ps =.757 and .247, respectively) suggesting the subscales measure distinct but related concepts.

Higher-Order Model Fit

Fit statistics for the higher-order model were excellent, suggesting that the six factors load on to the common factor of overall sexual difficulties: $Q = 1.99$; RMSEA = .042; 90% CI: [.037–.047]; CFI = .963.

Data Set B

First-Order Model Fit

The 25-item model, with four covariances, that was deemed optimal for Data Set A was tested. Fit statistics were excellent: $Q = 1.84$; RMSEA = .039; 90% CI [.033, .044]; CFI = .97; AIC = 608.95. All of the subscales were weakly positively correlated (rs = .09–.29, ps < .05), except for the ED and FD ($p = .324$).

Higher-Order Model Fit

Akin to Data Set A, fit statistics for the higher-order model tested with Data Set B were excellent: $Q = 1.90$; RMSEA = .040; 90% CI [.035, .045]; CFI = .967.

Response Mode and Timing

Participants indicate their answer by selecting the response that best corresponds to their experience of each statement. Responses are coded on a 6-point Likert-type scale: 0 (*not applicable*), 1 (*never*), 2 (*once or twice*), 3

(*several times*), 4 (*most of the time*), or 5 (*all of the time*). For four items (11, 12, 13, and 14), the response format is reverse scored. The scale takes no more than 5 minutes to complete. The time frame stem to be used before each item is "During the past 6 months . . ."

Scoring

Items are worded so that higher scores indicate greater sexual difficulties. To calculate a mean score and avoid overestimates of sexual difficulties, the "*not applicable*" option is coded as a missing value. Thus, rather than summing the scores for individual items on each subscale (and summing each subscale for a total scale score), for each respondent a mean score is computed based on the number of items the participant actually answered (i.e., items that were applicable to him). Items 1–5 correspond with the RAD subscale, 6–10 with the IAD subscale, 11–14 with the ED subscale (reverse scored), 15–18 with the BE subscale, 19–21 with the SFC subscale, and 22–25 with the FD subscale.

To assess the level of distress associated with each sexual difficultly, it is recommended that researchers employ indicators of distress for each item, for example, "How much distress did this cause you?" with a response format of 0 (*not applicable*), 1 (*no distress*), 2 (*mild distress*), 3 (*moderate distress*), and 4 (*severe distress*). To score the GMSDS with the additional distress indicators, three summary scores should be generated: (1) frequency, a simple count of the number of difficulties experienced, which can range from 0 to 125 (25 items in total; 0 [*not applicable*] to 5 [*all of the time*]); (2) cumulated distress, the sum of the 4-point distress ratings, which can range from 0 to 500 (4 × 125); and (3) intensity, which is cumulated distress divided by the frequency, which can range from 0 to 4 (i.e., higher scores indicate that one experiences sexual difficulties more intensely regardless of frequency).

Reliability

Cronbach's alpha for the six subscales and overall scale across the three data samples range from .74 for the IAD to .92 for the BE, ED, and FD.

Validity

In Study 1, to examine the known-groups validity of the GMSDS, *t*-tests were conducted which assessed the relationships between sexual difficulties and indicants of well-being (i.e., anxiety and depression). As predicted, in comparison to their low risk counterparts, gay men at risk for anxiety reported greater difficulties with receptive anal intercourse ($t_{[964.47]} = -8.58$, $p < .001$, $d = -0.54$) and insertive anal intercourse ($t_{[982.10]} = -5.99$, $p = .030$, $d = -.37$) as well as greater body embarrassment ($t_{[1009.40]} = -9.24$, $p < .001$, $d = -.56$), seminal fluid concerns ($t_{[1097.32]} = -2.11$, $p = .035$, $d = -0.14$), and overall sexual difficulties ($t_{[1028.27]} = -9.78$, $p < .001$, $d = -.58$). Similarly, those at risk for depression reported greater difficulties with receptive anal intercourse ($t_{[239.82]} = -4.34$, $p < .001$, $d = -.39$) and insertive anal intercourse ($t_{[245.68]} = -3.06$, $p = .002$, $d = -.27$) as well as greater erectile difficulties ($t_{[269.33]} = -3.64$, $p < .001$, $d = -.31$), body embarrassment ($t_{[255.13]} = -6.51$, $p < .001$, $d = -.56$), and overall sexual difficulties ($t_{[252.84]} = -4.89$, $p < .001$, $d = -.52$).

In Study 2 (Data Sets A and B), Pearson Product Moment correlations revealed weak, though statistically significant, positive correlations between overall sexual difficulties and self-consciousness during physical intimacy (Data Set A, $r_{[560]} = .26$, $p < .001$; Data Set B, $r_{[560]} = .22$, $p < .001$) as well as endorsement of hegemonic masculinity (Data Set A, $r_{[560]} = .16$, $p < .001$; Data Set B, $r_{[560]} = .24$, $p < .001$).

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Exhibit

Gay Male Sexual Difficulties Scale

During the past 6 months …

	0 Not applicable	1 Never	2 Once or twice	3 Several times	4 Most of the time	5 All the time
1. When you engaged in receptive anal intercourse, did you experience pain?	○	○	○	○	○	○
2. When you engaged in receptive anal intercourse, were you concerned about your ass being dirty?	○	○	○	○	○	○

3. When you engaged in receptive anal intercourse, were you concerned about your partner's penis being too big?	○	○	○	○	○	○
4. Have you had difficulty engaging in receptive anal intercourse because your partner's penis was too small?	○	○	○	○	○	○
5. Were you unable to engage in receptive anal intercourse because your ass was too loose?	○	○	○	○	○	○
6. When you penetrated a guy anally (i.e., topped him/fucked him), did you cum sooner than you wanted?	○	○	○	○	○	○
7. When you penetrated a guy anally, did you take longer to cum than you wanted?	○	○	○	○	○	○
8. When you engaged in insertive anal intercourse, did you experience pain?	○	○	○	○	○	○
9. Have you had difficulty engaging in insertive anal intercourse because your penis was too big?	○	○	○	○	○	○
10. Were you unable to engage in insertive anal intercourse because your partner's ass was too tight?	○	○	○	○	○	○
11. When you engaged in sexual activity, were you able to get an erection?	○	○	○	○	○	○
12. When you wanked (i.e., jerked off), were you able to get an erection?	○	○	○	○	○	○
13. When you engaged in sexual activity, were you able to maintain your erection (i.e., keep it up)?	○	○	○	○	○	○
14. When you wanked, were you able to maintain your erection?	○	○	○	○	○	○
15. When you engaged in sexual activity, were you embarrassed that your partner thought your body was too fat?	○	○	○	○	○	○
16. When you engaged in sexual activity, were you embarrassed that your partner thought your body was not muscular?	○	○	○	○	○	○
17. When you engaged in sexual activity, were you embarrassed that your partner thought your stomach was not toned?	○	○	○	○	○	○
18. Were you concerned that your partner thought your body was sexually unappealing?	○	○	○	○	○	○
19. When you engaged in sexual activity, were you concerned about the smell of your ejaculate (i.e., cum, spunk)?	○	○	○	○	○	○
20. When you engaged in sexual activity, were you concerned about the colour of your ejaculate?	○	○	○	○	○	○
21. When you engaged in sexual activity, were you concerned about the consistency (i.e., texture) of your ejaculate?	○	○	○	○	○	○
22. When you engaged in sexual activity, did you experience any difficulties because your foreskin was too tight?	○	○	○	○	○	○
23. When you wanked, did you experience any difficulties because your foreskin was too tight?	○	○	○	○	○	○
24. When you engaged in sexual activity, did you experience any difficulties because your penis had too much foreskin?	○	○	○	○	○	○
25. Have you had any difficulties putting on a condom because your penis had too much foreskin?	○	○	○	○	○	○

National Survey of Sexual Attitudes and Lifestyles Measure of Sexual Function (Natsal-SF)

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The 17-item National Survey of Sexual Attitudes and Lifestyles Measure of Sexual Function (Natsal-SF) is a brief measure designed to provide population prevalence estimates of sexual function in the last year. The measure assesses problems with individual sexual response, the sexual functioning of the relationship, and overall self-appraisal of sex life. It is designed to be brief, non-intrusive, and relevant to all sexual lifestyles. The Natsal-SF was originally designed for the third British National Survey of Sexual Attitudes and Lifestyles (Natsal-3; Mitchell et al., 2013).

Development

We defined sexual function as the inverse of the World Health Organization definition of dysfunction: the extent to which an individual is able to participate in a sexual relationship as he or she would wish (World Health Organization, 1992). We developed a conceptual framework of sexual function based on 32 semi-structured interviews with individuals representing a wide range of sexual function experience, recruited from a family doctor waiting room (n = 10), family doctor diabetes and depression patient lists (n = 13), HIV charity (n = 3) and a sexual problems clinic (n = 6). Analysis of their accounts identified 31 potential criteria which were reduced to 13 using the qualitative data, evidence from the literature, and a set of decision rules regarding relevance to the construct, public health import, and overlap with other items. A further eight criteria were added to enable individuals to self-rate their function and assess severity of problems (Mitchell & Wellings, 2013). The criteria were translated into draft items and pre-tested via cognitive interviews (n = 12) to assess acceptability, comprehension, relevance to actual experience, and formatting.

The initial set of items were tested via an internet panel survey (administered by a UK leading market research company; n = 1262 with 144 completing a re-test 2 weeks later) and clinical sample (n = 100; recruited from NHS sexual problems clinics in London). We restricted analysis to participants who reported having sex in the past year. Exploratory Factor Analysis (EFA) suggested three latent factors and identified four items for omission (since they added no information to the model). With the EFA results as a guide, we tested restricted Confirmatory Factor Analysis (CFA) models in terms of their fit to the data. The selected measurement model was subsequently combined with a set of observed covariates as well as external validation criteria in order to provide conservative estimates of external validity in a fully adjusted structural model (Mitchell, Ploubidis, Datta, & Wellings, 2012). All items loaded satisfactorily on the general Natsal-SF latent factor (.493–.912), with the exception of one ("reached a climax more quickly than you would like"), which was retained for theoretical reasons.

Response Mode and Timing

The Natsal-SF is designed to be completed on computer in around 6 minutes (Flesch Reading Ease Score was 66.6; acceptable range: 60–70). Participants who have had sex at least once in the past year report experience of any of eight sexual difficulties for 3 months or more in the last year. Those in a relationship for the past year complete four items on the functioning of the relationship (compatibility in levels of interest, compatibility in likes and dislikes, emotional closeness and whether partner has a problem). All ever sexually active participants complete four overall appraisal items (avoidance, satisfaction, distress and help-seeking).

Scoring

The estimated latent Natsal-SF scores were normally distributed (Skewness = –.116, Kurtosis –.229) and ranged from –6.2 to 7.3, with high scores indicating poorer sexual

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TABLE 1
Simple Scoring Method for Natsal-SF (Abridged from Jones et al., 2015)

	Scoring
Sexual problems	**Max 14**
1. In the last year, have you experienced any of the following for a period of 3 months or longer? (Tick all that apply)	
Lacked interest in having sex	2
Lacked enjoyment in sex	2
Felt anxious during sex	2
Felt physical pain as a result of sex	2
Felt no excitement or arousal during sex	2
Did not reach a climax (experience an orgasm) or took a long time to reach a climax despite feeling excited/aroused	1
Reached a climax (experienced an orgasm) more quickly than you would like	1
Had an uncomfortably dry vagina/Had trouble getting or keeping an erection	2
None of these	0
Sexual partnership	**Max 16 (multiplied by .6875)**
2. My partner and I share about the same level of interest in having sex	
Agree strongly	0
Agree	1
Neither agree nor disagree	2
Disagree	3
Disagree strongly	4
3. My partner and I share the same sexual likes and dislikes	
Agree strongly	0
Agree	1
Neither agree nor disagree	2
Disagree	3
Disagree strongly	4
4. My partner has experienced sexual difficulties in the last year	
Agree strongly	4
Agree	3
Neither agree nor disagree	2
Disagree	1
Disagree strongly	0
5. I feel emotionally close to my partner when we have sex together	
Always	0
Most of the time	1
Sometimes	2
Not very often	3
Hardly ever	4
Overall sex life	**Max 13**
6. I feel satisfied with my sex life	
Agree strongly	0
Agree	1
Neither agree nor disagree	2
Disagree	3
Disagree strongly	4
7. I feel distressed or worried about my sex life	
Agree strongly	4
Agree	3
Neither agree nor disagree	2
Disagree	1
Disagree strongly	0
8. I have avoided sex because of sexual difficulties, either my own or those of my partner	
Agree strongly	4
Agree	3
Neither agree nor disagree	2
Disagree	1
Disagree strongly	0
9. Have you sought help or advice regarding your sex life from any of the following sources in the last year?	
None	0
At least one of the listed sources	1
Total possible score (participants *not* in sexual relationship for all of last year)	27
Total possible score (for participants *in* sexual relationship for all of last year)	38

function. Ideally the Natsal-SF should be scored using latent variable modelling (General-Specific Model), but where this is not possible, a simpler scoring method can be used (reproduced in Table 1) which results in a similar distribution, correlates highly with the original score, and has similar relationships with previously identified co-variates (Jones et al., 2015).

Reliability

Confirmatory factor analysis with the general population and clinical sample described above (N = 1362) established that a "general specific model" had the best fit and was invariant across age, gender, and clinical status (CFI = .963; Tucker Lewis Index = .951; RMSEA = .064). The test–retest reliability of the Natsal-SF general factor was r = .72, p < .001) (Mitchell et al., 2012).

Validity

There is no standard instrument for measuring sexual function at population level, but we validated the Natsal-SF against two established validated measures with similar dimensions. In the validation study (Mitchell et al., 2012), the Natsal-SF was positively associated with the Female Sexual Function Index-6 (B = .572) and Brief Sexual Function Questionnaire for men (B = .705). It can discriminate between clinical and general population groups (OR = 2.667) and is associated with self-reported general health (OR = 1.171, p < .05), depression (OR = 1.202, p < .001) and current life satisfaction (OR = .839, p < .001; Mitchell et al., 2012).

Summary

The Natsal-SF is a brief, valid and reliable measure of prevalence of sexual function in the general population in the last year. It is free to use with permission from the authors and with proper acknowledgment.

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Exhibit

National Survey of Sexual Attitudes and Lifestyles Measure of Sexual Function (Natsal-SF)

Filtering questions

Which of the following best describes your relationship status in for the past year (or more)?

- ○ Married
- ○ Civil Partnership
- ○ In a steady relationship
- ○ None of the above [Participants indicating this should be routed past Q10–Q13]

Have you had oral, vaginal or anal sex in the last year?

- ○ Yes
- ○ No [Participants indicating *No* should be routed to Q14]

Natsal-SF measure

Some people go through times when they are not interested in sex or find it difficult to enjoy sexual activities. The questions that follow are about some common difficulties that people experience.

In the last year, have you experienced any of the following for a period of 3 months or longer? Please tick all that apply. If you have not experienced any please tick 9.

- ☐ 1. Lacked interest in having sex
- ☐ 2. Lacked enjoyment in sex
- ☐ 3. Felt anxious during sex
- ☐ 4. Felt physical pain as a result of sex
- ☐ 5. Felt no excitement or arousal during sex
- ☐ 6. Did not reach a climax (experience an orgasm) or took a long time to reach a climax despite feeling excited or aroused
- ☐ 7. Reached a climax (experienced an orgasm) more quickly than you would like
- ☐ 8. Had an uncomfortably dry vagina (women)/Had trouble getting or keeping an erection (men)
- ☐ 9. None of these

You previously mentioned that you have been [insert relationship status] for at least one year. Thinking about your relationship with this partner in the last year, how much do you agree or disagree with the following statements.

	Agree strongly	Agree	Neither agree nor disagree	Disagree	Strongly disagree
10. My partner and I share about the same level of interest in having sex.	○	○	○	○	○
11. My partner and I share the same sexual likes and dislikes.	○	○	○	○	○
12. My partner has experienced sexual difficulties in the last year.	○	○	○	○	○

13. I feel emotionally close to my partner when we have sex together.

- ○ Always
- ○ Most of the time
- ○ Sometimes
- ○ Not very often
- ○ Hardly ever

The next few questions ask about your sex life in the last year. An individual's sex life includes their sexual thoughts, sexual feelings, sexual activity and sexual relationship.

Thinking about your sex life in the last year, how much do you agree or disagree with the following statements:

	Agree strongly	Agree	Neither agree nor disagree	Disagree	Strongly disagree
14. I feel satisfied with my sex life.	○	○	○	○	○
15. I feel distressed or worried about my sex life.	○	○	○	○	○
16. I have avoided sex because of sexual difficulties, either my own or those of my partner.	○	○	○	○	○

17. Have you sought help or advice regarding your sex life from any of the following sources in the last year? (Tick all that apply)

- ☐ 1. Family member/friend
- ☐ 2. Information and support sites on the internet
- ☐ 3. Self-help books/Information leaflets
- ☐ 4. Self-help groups
- ☐ 5. Helpline
- ☐ 6. GP/Family doctor
- ☐ 7. Sexual health/GUM/STI clinic
- ☐ 8. Psychiatrist or psychologist
- ☐ 9. Relationship counsellor
- ☐ 10. Other type of clinic or doctor
- ☐ 11. Have not sought any help

Sexual Desire and Relationship Distress Scale

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The Sexual Desire and Relationship Distress Scale (SDRDS) was developed to provide a comprehensive self-assessment of distress attributable to low sexual desire with demonstrated content validity in women with hypoactive sexual desire disorder (HSDD) (Revicki et al., 2012). The SDRDS was developed to address the need for a patient-reported outcome (PRO) measure of sexual distress associated with HSDD. The SDRDS is a PRO measure that includes questions related to personal distress and distress connected to relationship with partner specifically related to low sexual desire. The SDRDS provides a comprehensive measure of distress related to low sexual desire and the impact on the couple's relationship.

Development

The SDRDS was developed consistent with good psychometric practice and the US Food and Drug Administration guidance on PRO measures to support product labeling

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(Food and Drug Administration, 2009). We based the content of the SDRDS on qualitative evidence derived from women with HSDD (i.e., the target population), and samples of women with low sexual desire were consulted to evaluate the content validity of the measure at every stage of instrument development. Initially, focus groups (N = 66) were used to collect information from pre- and post-menopausal women with HSDD or decreased sexual desire about their experiences with decreased sexual desire and the words these women used to describe their experiences. These qualitative data revealed that HSDD was not only associated with personal distress, but also had a negative impact on a woman's relationship with her partner (Revicki et al., 2010). Qualitative analysis of transcripts of the focus groups identified common themes concerning decreased sexual desire, which were used to construct a draft 21-item questionnaire covering distress relating to personal experience (11 items) and relationship with partner (10 items). The 21-item questionnaire was then assessed in a second qualitative study. Following cognitive debriefing interviews (N = 14), redundant items were removed and the remaining 17 items were refined, resulting in the final SDRDS. A 14-day recall period was selected based on feedback from the participants.

An observational study recruited 260 pre- and post-menopausal women with either HSDD or with no diagnosis of sexual dysfunction (i.e., normal controls) from ten US clinical centers for the psychometric analyses (Revicki et al., 2012). Exploratory factor analysis did not support two separate factors (e.g., personal distress and relationship distress), therefore all items were grouped into a single total score. Factor analyses by pre- and post-menopausal status also supported a single, unidimensional factor. For the factor analyses, a single factor explained 70 percent of the variance in the item scores. Item response theory analysis confirmed the unidimensionality and SDRDS item performance, with all items fitting the graded response model. SDRDS individual item scores correlated strongly with the total score (rs ranging from.74 to .87). There were no differences in the performance of the SDRDS items between the pre- and post-menopausal groups.

Response Mode and Timing

The SDRDS is composed of 17 items related to sexual distress scored on a 5-point Likert-type scale ranging from 0 (*never distressed or bothered*) to 4 (*very often distressed or bothered*). A 14-day recall period is used for this instrument. Most participants should be able to complete the SDRDS in less than five minutes.

Scoring

The SDRDS is scored by summing the 17 individual items. Thus the total SDRDS score ranges from 0 to 68, with higher scores indicating greater distress.

Reliability

Based on the psychometric study sample (N = 260), the SDRDS demonstrated strong internal consistency, with Cronbach's alpha values of .97 at baseline, .97 at week 2, and .98 at week 4 (Revicki et al., 2012). Test–retest reliability of the SDRDS was assessed in the 227 women who reported no change in their distress between baseline and week 2. The mean (±SD) difference in SDRDS score between baseline and week 2 in this group was –3.5 ± 8.5. The SDRDS demonstrated good test–retest reliability, with an intraclass correlation coefficient of .89.

Validity

Based on the Revicki et al. (2012) observational study, SDRDS scores were strongly correlated with the Female Sexual Distress Scale-Revised (FSDS-R; DeRogatis, Clayton, Lewis-D'Agostino, Wunderlich, & Fu, 2008) total score (r = .93 to .94), and moderately correlated with frequency of sexual activity (r = –.49 to –.52), satisfaction with sexual activities (r = –.69 to –.75), and the Female Sexual Function Inventory (FSFI; Rosen et al., 2000) frequency of sexual desire (r = –.59 to –.63) and level of sexual desire (r = –.62 to –.69; all ps < .0001) in the hypothesized directions. Correlations with the Beck Depression Inventory-II (Beck, Steer, & Brown, 1996) were weaker (r = .34).

In an assessment of known groups validity of the SDRDS, mean (±SE) SDRDS scores at baseline were higher in women with HSDD compared with women who did not have sexual dysfunction (43.1 ± .9 vs 6.1 ± 1.7; p < .00001). Mean (±SE) SDRDS scores at baseline were higher in women who scored above the median of 15 on the FSDS-R compared with women who scored below the median (44.6 ± .9 vs 7.8 ± 1.4; p < 0. 0001). In addition, mean (±SE) SDRDS scores at baseline were higher in women who scored below the median of 2.4 on the FSFI desire domain compared with those women who scored at least 2.4 (47.5 ± 1.6 vs 25.0 ± 1.4; p < .0001).

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Exhibit

Sexual Desire Distress Questionnaire

Please select the response for each question that best describes how often you were distressed or bothered because of your decreased sexual desire *during the past 14 days*. Please note that "sexual activities" includes all types of sexual activity, including sexual intercourse, oral sex, masturbation, and genital stimulation by your partner.

There are no right or wrong answers. Please be sure to answer every question.

During the past 14 days, how often were you distressed or bothered by the following?

	0 Never distressed or bothered	1 Rarely distressed or bothered	2 Sometimes distressed or bothered	3 Often distressed or bothered	4 Very often distressed or bothered
1. Having decreased sexual desire.	○	○	○	○	○
2. Not initiating sexual activities.	○	○	○	○	○
3. Being unwilling to take part in sexual activities.	○	○	○	○	○
4. Wishing that your sexual desire would return.	○	○	○	○	○
5. Feeling that something is lacking with you because of your decreased sexual desire.	○	○	○	○	○
6. Not enjoying sexual activities.	○	○	○	○	○
7. Feeling a lack of self-worth because of your decreased sexual desire.	○	○	○	○	○
8. Feeling inadequate because of your decreased sexual desire.	○	○	○	○	○
9. Feeling unsatisfied with your sexual relationship.	○	○	○	○	○
10. Having sexual activities with your partner just to satisfy your partner.	○	○	○	○	○
11. Not fulfilling your partner's sexual needs.	○	○	○	○	○
12. Not responding to your partner's sexual advances.	○	○	○	○	○
13. The decline or loss of physical intimacy with your partner.	○	○	○	○	○
14. The decline or loss of emotional closeness with your partner.	○	○	○	○	○
15. Thinking that your partner might be unfaithful because of your decreased sexual desire.	○	○	○	○	○
16. Thinking that your partner might end the relationship because of your decreased sexual desire.	○	○	○	○	○
17. Having arguments with your partner because of your decreased sexual desire.	○	○	○	○	○

Sexual Dysfunction Attributions Scale

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The Sexual Dysfunction Attributions Scale (SDAS; Stephenson & Meston, 2016) assesses an individual's causal attributions, or subjective beliefs regarding the causes of their impaired sexual function (problems with sexual desire, arousal, orgasm, and/or sexual pain). Previous research has suggested that these beliefs may play a key role in predicting individual coping behaviors and subjective well-being (Durtschi, Fincham, Cui, Lorenz, & Conger, 2011), and may influence adjustment to sexual difficulties specifically (Mitchell, King, Nazareth, & Wellings, 2011). The SDAS includes 13 items assessed on a Likert-type scale that measure a range of attributions including locus, control, and blame.

Development

Existing scales of causal attributions regarding sexual problems are limited in that they either focus on only a single facet of sexual function (e.g., Jodoin et al., 2011) and/or include a relatively narrow range of attributions, e.g., internal vs. external, global vs. specific, and stable vs. unstable. Research in relational conflict, however, has identified a broader range of relevant causal attributions including controllability (whether the individual/their partner can control the cause of conflict) and blame (whether the individual/their partner deserves to be blamed for the cause of conflict).

In an effort to better capture this range of attributions, we adapted the Relationship Attribution Measure (RAM; Fincham & Bradbury, 1992) to focus specifically on impaired sexual function. For example, the RAM item "My spouse's behavior was due to something about him/her" was adapted to read "Something about my partner causes my sexual difficulties." Additional items were created in order to measure aspects of sexual dysfunction that were not as relevant to relational conflict. For example, "My spouse's behavior was due to something about me" was split into two items to differentiate between the physiological ("Something about me physically causes my sexual difficulties") and psychological ("Something about me personally causes my sexual difficulties") aspects of oneself as separate causes of sexual problems (Fincham & Bradbury, 1992; Stephenson & Meston, 2016). This adapted scale was titled the Sexual Dysfunction Attributions Scale. The scale begins by providing participants with clear definitions of the different areas of sexual dysfunction (desire, arousal, orgasm, and pain), as well as examples of various sexual impairments, and asks participants to imagine their own sexual problems when completing the measure (see scale below).

The scale was administered to two samples of heterosexual women both in-person (N = 97) and online (N = 485). All participants were women, 18 years or older, currently in a heterosexual monogamous relationship, and reporting one or more impairments in sexual function. For initial validation analyses, only participants who were in committed relationships or married, and scoring in the clinical range for sexual dysfunction on the Female Sexual Function Index (below 26.55, lower scores indicating greater impairment; Wiegel, Meston, & Rosen, 2005) were included (N = 147). Specifically, 66 women from the in-person sample were included (M_{age} = 28, SD = 7 years), and 81 women from the online sample were included (M_{age} = 26.31, SD = 7.6 years).

An exploratory principal components analysis identified four sub-factors (two items were excluded due to unclear factor loadings). The first sub-factor was labeled "Partner's Fault," with higher scores indicating a stronger belief that the individual's partner was a cause of their sexual impairment, had control over the causes of the individual's sexual difficulties, had negative intent, and should be blamed for the individual's sexual impairments. The second sub-factor was labeled "My Fault," with higher scores indicating a stronger belief that, although external factors contributed to the individual's sexual impairments, the individual herself also contributed to her sexual impairments and should be blamed. The third sub-factor was labeled "Specific to Sex," with higher scores indicating a stronger belief that the causes of sexual impairment were specific to sexual activity (versus indicating broader problems in the relationship), and that their partner had positive intentions when influencing the individual's sexual function. A fourth factor was labeled "Addressable Problem," with higher scores indicating a stronger belief that participants had control over the causes of their sexual difficulties, and the causes were not stable.

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Response Mode and Training

The SDAS contains 13 items respondents complete using a Likert-type response. It can be finished in approximately 3–5 minutes either via computer or with a pen and paper. Participants rate their agreement with a series of statements on a 6-point scale, with higher scores indicating higher levels of agreement. Anchor points are specified below each item. Although respondents may be experiencing sexual difficulties that are not included in the instructions (e.g., difficulties communicating with a partner about sex), they are asked to focus only on the difficulties included in the directions (desire, arousal, orgasm, and pain). Administering and scoring the scale does not require any specialized training.

Scoring

Higher scores on each item indicate stronger agreement with the item. While each item can be assessed individually, items can also be combined into their factors and averaged to determine their factor scores (when being combined into subscale scores, Item 7 should be reverse coded when computing the Addressable Problem score. Item 11 should be reverse coded when computing the Partner's Fault score, but not reverse coded when computing the Specific To Sex score). The first factor, *Partner's Fault*, consists of Items 3, 9, 11 (reverse coded), and 12, and had a sample mean of 2.2 (SD = 1.0). The second factor, *My Fault*, includes Items 2, 4, and 13, and had a sample mean of 3.4 (SD = 1.2). The third factor, *Specific to Sex*, includes Items 5 and 11, and had a sample mean of 4.2 (SD = 1.2). Finally, the fourth factor, *Addressable Problem*, includes Items 7 (reverse coded) and 8, and had a sample mean of 2.7 (SD = 1.0; Stephenson & Meston, 2016).

Reliability

In a sample of women experiencing sexual difficulties who were generally young, well-educated, and in sexually active relationships, the scale exhibited low to moderate internal reliability within sub-factors, with Cronbach's alpha values ranging from .35 (*Specific to Sex*) to .71 (*Partner's Fault*). This factor structure has yet to be replicated in an independent sample, or with male respondents. Additionally, other measures of reliability, such as test–retest reliability, need to be established (Stephenson & Meston, 2016).

Validity

The measure demonstrated convergent and divergent validity using different measures of subjective well-being. For example, attributions more directly related to the individual's relationship, such as viewing the partner as the cause of their sexual difficulties, were more strongly associated with relational satisfaction ($r = -.53$, $p < .001$) than personal sexual distress (e.g., shame and frustration regarding the sexual problem; $r = .28$, $p < .01$). Alternatively, attributions more directly related to one's self (e.g., viewing the cause of their sexual difficulties as internal) were more strongly associated with personal sexual distress (e.g., $r = -.28$, $p < .01$) than with relational satisfaction ($r = .11$, $p > .05$; Stephenson & Meston, 2016).

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Exhibit

Sexual Dysfunction Attributions Scale

For the following scale, we are defining sexual difficulties as problems you have experienced with sexual functioning. Sexual functioning has four primary areas:

1. Sexual desire: a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about sex. Sample difficulty: feeling low or no desire to engage in sexual activity

2. Sexual arousal: a feeling that includes both physical and mental aspects of sexual excitement. It may include feelings or warmth or tingling in the genitals, or vaginal lubrication. It may also include feeling "into it" or "turned on" during sexual activity. Sample difficulty: a lack of genital lubrication, or, not feeling turned on during sex.
3. Orgasm: the frequency and ease with which you experience climax or orgasm during sexual activity. Sample difficulty: lack of orgasm, or taking too long to climax
4. Sexual pain: pain or discomfort during sexual activity. Sample difficulty: a sharp pain felt during vaginal penetration. While many women are bothered by issues not included in the list above, we would like you to focus on difficulties in these four areas when answering the following questions.

Sexual difficulties can be caused by many factors related to the individual, the relationship, external concerns (work, children, etc.), or the wider culture. While it is usually difficult to identify one specific cause of a sexual difficulty, most people have an opinion as to what causes their sexual difficulties. Please answer the questions below regarding what you see as causing your sexual difficulties. These responses will be based on your opinion only; there are no right or wrong answers.

	1 Strongly disagree	2	3	4	5	6 Strongly agree
1. Something about me physically causes my sexual difficulties (e.g., my own physical/medical issues).	○	○	○	○	○	○
2. Something about me personally causes my sexual difficulties (e.g., the type of person I am, the mood I am in).	○	○	○	○	○	○
3. Something about my partner causes my sexual difficulties (e.g., the type of person he/she is, the mood he/she is in, his/her physical/medical issues).	○	○	○	○	○	○
4. Outside circumstances cause my sexual difficulties (e.g., lack of privacy, social pressures).	○	○	○	○	○	○
5. The cause of my sexual difficulties is specific to sexual activity.	○	○	○	○	○	○
6. The cause of my sexual difficulties affects many areas of my relationship.	○	○	○	○	○	○

7. How stable are the causes of your sexual difficulties?

	1	2	3	4	5	6	
Causes will never again be present	○	○	○	○	○	○	Causes will always be present

8. To what extent do you have control over the causes of your sexual difficulties?

	1	2	3	4	5	6	
I have no control	○	○	○	○	○	○	I have complete control

9. To what extent does your partner have control over the causes of your sexual difficulties?

	1	2	3	4	5	6	
He/she has no control	○	○	○	○	○	○	He/she has complete control

10. To what extent does your partner purposefully affect your sexual functioning?

	1	2	3	4	5	6	
Not at all	○	○	○	○	○	○	Very much

11. Is your partner's intent generally positive (he/she trying to help) or negative (he/she trying to be detrimental)?

	1	2	3	4	5	6	
Negative	○	○	○	○	○	○	Positive

12. Does your partner deserve to be blamed for your sexual difficulties?

	1	2	3	4	5	6	
Deserves no blame	○	○	○	○	○	○	Deserves all blame

13. Do you deserve to be blamed for your sexual difficulties?

	1	2	3	4	5	6	
Deserve no blame	○	○	○	○	○	○	Deserve all blame

26 Sexual Prejudice

Lesbian, Gay, and Bisexual Knowledge and Attitudes Scale

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Recent scholars have conceptualized attitudes toward lesbian, gay, and bisexual (LGB) individuals as multidimensional and wide-ranging (Worthington, Savoy, Dillon, & Vernaglia, 2002). There are two concurrent yet divergent trends in the United States with respect to attitudes toward LGB individuals. Although Yang (2000) has reported data that suggest a gradual trend over the past 25 years toward more positive attitudes among the general population, there also has been a corresponding increase in highly publicized violence (Cloud, 2008) and a mixture of outcomes in a variety of judicial and legislative legal battles over LGB civil rights issues. Furthermore, as LGB individuals become more visible in the mainstream of United States culture, knowledge of LGB history, symbols, and community is likely to evidence corresponding increases. Therefore, as attitudes toward LGB individuals reflect widening complexities in society, it is critical that scientific measurement provides increasing precision of range and dimensionality.

The Lesbian, Gay, and Bisexual Knowledge and Attitudes Scale (LGB-KAS) measures respondents' attitudes and knowledge regarding LGB individuals. The multidimensional and wide-ranging factors assessed by the LGB-KAS include (a) *Internalized Affirmativeness*: a willingness to engage in proactive social activism for LGB issues and internalized sense of comfort with same-sex attractions, (b) *Civil Rights Attitudes*: beliefs about the civil rights of LGB individuals with respect to marriage, child rearing, health care, and insurance benefits, (c) *Knowledge*: basic knowledge about the history, symbols, and organizations related to the LGB community, (d) *Religious Conflict*: conflictual beliefs and ambivalent homonegativity with respect to LGB individuals, often of a religious nature, and (e) *Hate*: attitudes about avoidance, self-consciousness, hatred, and violence toward LGB individuals. The scale is intended for self-identifying heterosexual respondents.

Development

The development and validation of the LGB-KAS included four studies (Worthington, Dillon, & Becker-Schutte, 2005). In Study 1, item development procedures and an exploratory factor analysis of an initial item pool were conducted. Discriminant validity estimates also were examined. A review of (a) measures of homophobia, racism, and sexism, (b) literature examining attitudes toward LGB individuals, and (c) the Worthington et al. (2002) model of sexual identity yielded 211 initial items. Pilot studies decreased the item pool to 32 items. The remaining items reflected the following dimensions: violent homonegativity (e.g., "I sometimes feel violent toward gay men/lesbian women/bisexual individuals"); homophobic intolerance (e.g., "Same-sex marriage just does not make sense to me"); negatively ambivalent attitudes (e.g., "I do not care what LGB individuals do as long as they do not draw attention to themselves"); indifference (e.g., "I have never given much thought to my beliefs about lesbian, gay, or bisexual people"); positively ambivalent attitudes (e.g., "I'm not sure what to say or do when someone makes an anti-LGB joke or statement"); affirmative or supportive attitudes (e.g., "It is important to teach children positive attitudes about LGB people"); and specific attitudes toward lesbians or gay men or bisexual persons (e.g., "Lesbian women [Gay men] should be allowed to adopt children"; "Gay men [Lesbian women] deserve the hatred they receive"). In addition, 28 items were developed to expand the range of items included in the measure. These new items reflected more contemporary issues related to civil rights (e.g., "Hospitals should acknowledge same-sex partners equally to any other next of kin"), items intended to reflect differential negativity toward lesbians versus gay men versus bisexual individuals (e.g., ["Lesbian/Gay/Bisexual] individuals should not be allowed to work with children"), and issues of religiosity

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(e.g., "I keep my religious views to myself in order to accept LGB people"). These items also were intended to reflect the present literature on attitudes and offer the foundation for multiple forms of the LGB-KAS to independently examine attitudes and knowledge regarding gay men or lesbians or bisexual men and women. An exploratory factor analysis (EFA) using principal axis factor extraction was conducted with the remaining 60 items of the LGB-KAS. A five-factor solution using an oblique rotation yielded the most interpretable solution.

In Study 2, the factor stability of the initial EFA solution was established via confirmatory factor analyses, and construct validity estimates were obtained. Study 3 provided the test–retest reliability estimates of the instrument and evidence of convergent validity. In Study 4, another indication of construct validity of the LGB-KAS was investigated, that is, the sensitivity of the LGB-KAS to change across sexual orientation identities (Worthington et al., 2005).

Response Mode and Timing

Participants respond to each item using a 6-point Likert-type scale ranging from 1 (*Very Uncharacteristic of Me or My Views*) to 6 (*Very Characteristic of Me or My Views*). It typically takes a participant approximately 10 minutes to complete the LGB-KAS.

Scoring

The LGB-KAS consists of 28 items. Each item represents an attitude or fact concerning LGB individuals or issues. Higher factor scores are indicative of a stronger endorsement of beliefs (or a higher level of knowledge) concerning each of the five factors (*Internalized Affirmativeness, Civil Rights Attitudes, Knowledge, Religious Conflict*, and *Hate*).

LGB-KAS subscale scores are obtained by summing all items within each of the five subscales (*Hate* = items 4, 8, 9, 14, 18, 24; *Knowledge* = items 1, 5, 10, 16, 20; *Civil Rights* = items 11, 23, 25, 27, 28; *Religious Conflict* = items 2, 3, 7, 12, 13, 22, 26; *Internalized Affirmativeness* = items 6, 15, 17, 19, 21) and dividing by the number of items on the subscales receiving responses. Items with missing data are not scored or included in the averaging). There are no reverse-scored items.

Reliability

The LGB-KAS subscales have evidenced adequate internal consistency (Cronbach's $\alpha > .70$) in past studies (Worthington et al., 2005). Test–retest reliability estimates indicated LGB-KAS subscale scores as highly stable over a 2-week time period (Worthington et al., 2005).

Validity

Discriminant validity was evidenced by an absence of relations between the total scale and subscales and a measure of impression management (Worthington et al., 2005). Construct validity was supported through (a) exploratory and confirmatory factor analyses, (b) correlations between LGB-KAS subscales and social dominance orientation and sexual identity exploration, and (c) findings indicating differences between heterosexual and LGB individuals on all five subscales (Worthington et al., 2005). Convergent validity for subscales was supported by correlations with measures of attitudes toward bisexuality, as well as lesbian women and gay men (Worthington et al., 2005). More recently, Worthington & Reynolds (2009) have demonstrated that the LGB-KAS can be administered to LGB individuals to obtain information about internalized homonegativity.

Other Information

Ann M. Becker-Schutte was one of the original authors of the scale.

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Exhibit

Lesbian, Gay, and Bisexual Knowledge and Attitudes Scale

Instructions: Please use the scale below to respond to the following items. Select the number that indicates the extent to which each statement is characteristic or uncharacteristic of you or your views.

Please try to respond to every item.

Note: LGB = Lesbian, Gay, or Bisexual. Please consider the *entire* statement when making your rating, as some statements contain two parts.

	1 Very Uncharacteristic of Me or My Views	2	3	4	5	6 Very Characteristic of Me or My Views
1. I feel qualified to educate others about how to be affirmative regarding LGB issues.	○	○	○	○	○	○
2. I have conflicting attitudes or beliefs about LGB people.	○	○	○	○	○	○
3. I can accept LGB people even though I condemn their behavior.	○	○	○	○	○	○
4. It is important to me to avoid LGB individuals.	○	○	○	○	○	○
5. I could educate others about the history and symbolism behind the "pink triangle."	○	○	○	○	○	○
6. I have close friends who are LGB.	○	○	○	○	○	○
7. I have difficulty reconciling my religious views with my interest in being accepting of LGB people.	○	○	○	○	○	○
8. I would be unsure what to do or say if I met someone who is openly lesbian, gay, or bisexual.	○	○	○	○	○	○
9. Hearing about a hate crime against an LGB person would not bother me.	○	○	○	○	○	○
10. I am knowledgeable about the significance of the Stonewall Riot to the Gay Liberation Movement.	○	○	○	○	○	○
11. I think marriage should be legal for same-sex couples.	○	○	○	○	○	○
12. I keep my religious views to myself in order to accept LGB people.	○	○	○	○	○	○
13. I conceal my negative views toward LGB people when I am with someone who doesn't share my views.	○	○	○	○	○	○
14. I sometimes think about being violent toward LGB people.	○	○	○	○	○	○

15. Feeling attracted to another person of the same sex would not make me uncomfortable.	○	○	○	○	○	○
16. I am familiar with the work of the National Gay and Lesbian Task Force.	○	○	○	○	○	○
17. I would display a symbol of gay pride (pink triangle, rainbow, etc.) to show my support of the LBG community.	○	○	○	○	○	○
18. I would feel self-conscious greeting a known LGB person in a public place.	○	○	○	○	○	○
19. I have had sexual fantasies about members of my same sex.	○	○	○	○	○	○
20. I am knowledgeable about the history and mission of the PFLAG organization.	○	○	○	○	○	○
21. I would attend a demonstration to promote LGB civil rights.	○	○	○	○	○	○
22. I try not to let my negative beliefs about LGB people harm my relationships with the lesbian, gay, or bisexual individuals I know.	○	○	○	○	○	○
23. Hospitals should acknowledge same-sex partners equally to any other next of kin.	○	○	○	○	○	○
24. LGB people deserve the hatred they receive.	○	○	○	○	○	○
25. It is important to teach children positive attitudes toward LGB people.	○	○	○	○	○	○
26. I conceal my positive attitudes toward LGB people when I am with someone who is homophobic.	○	○	○	○	○	○
27. Health benefits should be available equally to same-sex partners as to any other couple.	○	○	○	○	○	○
28. It is wrong for courts to make child custody decisions based on a parent's sexual orientation.	○	○	○	○	○	○

Attitudes Towards Asexuals Scale

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Asexuality, a lack of sexual attraction, is a sexual orientationand sexual identity label, akin to heterosexuality, homosexuality, and bisexuality (Bogaert, 2012; Brotto & Yule, 2017). According to the "differences as deficits model" of sexual prejudice, sexual minorities (i.e., those with sexual orientations other than heterosexual) tend to be devalued and tend to be viewed more negatively in comparison to heterosexuals (Herek, 2010). Asexuals are targets of bias and dehumanization (MacInnis & Hodson, 2012), with self-reported levels of bias and discrimination intentions against asexuals comparable to levels of bias against homosexuals and bisexuals (Hoffarth, Drolet, Hodson, & Hafer, 2016; MacInnis & Hodson, 2012). Asexuality tends to be viewed as a flaw or defect, and many asexuals report being treated as abnormal or pathological (Carrigan, 2011; Chasin, 2015). Like other sexual minorities, asexuals are also characterized as violating traditional gender roles (Chasin, 2015).

The Attitudes Towards Asexuals Scale (ATA) is the first validated, multi-item measure of anti-asexual bias (Hoffarth et al., 2016). The ATA consists of 16 self-report items (3 reverse-scored) on 9-point Likert scales, ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). Higher scores indicate greater anti-asexual bias.

Development

Some items in the ATA were modified from the Attitudes Towards Lesbians and Gay Men (ATLG) Scale (Herek, 1988), a widely used measure of anti-gay bias. Others were generated by Hoffarth and colleagues (2016) based on themes in past research on anti-asexual bias: viewing asexuals as deficient, perceiving asexuality as violating gender roles, and viewing asexuality as an illegitimate sexual orientation (see Carrigan, 2011; Chasin, 2015; MacInnis & Hodson, 2012). Twenty-three items were originally generated for the measure. Three items with low variability were removed, and four items that did not as directly capture a negative attitude (compared to the other items) were removed, resulting in a 16-item measure. All 16 items loaded on a single component at .46 or above. The ATA was developed with a sample of Amazon Mechanical Turk participants from the United States who were 18 or older and spoke English as a first language. The ATA is intended for use in any adult population.

Response Mode and Timing

The ATA is a self-report measure, and follows a standard Likert Scale format (with response anchors of "*strongly disagree*" and "*strongly agree*"). The ATA may be completed by computer or in print format, and takes approximately 2–3 minutes to complete.

Scoring

The ATA is a single component measure, indicating general levels of anti-asexual bias. Scores are determined by first reverse-coding three items (Items 10, 14, and 16) and then calculating the average of all 16 items, yielding a minimum score of 1 and a maximum score of 9.

Reliability

In the study in which the ATA was developed (Hoffarth et al., 2016), the measure demonstrated strong internal reliability ($\alpha = .94$; mean inter-item correlation = .50), and all items loaded on a single large component (accounting for 53.9% of variability) at .46 or above. Test–retest reliability of the ATA has not yet been examined.

Validity

Hoffarth and colleagues (2016) found evidence for the ATA's validity. The ATA demonstrated convergent validity in that it was negatively correlated with an asexuals attitude thermometer measure ($r = -.61$), indicating a strong but non-redundant association with disliking asexuals. The ATA was also associated with greater Right-Wing Authoritarianism ($r = .49$), Social Dominance Orientation ($r = .35$), and endorsement of traditional male and female gender roles (rs = .38 to .54), constructs that are theoretically associated with anti-asexual bias. The ATA showed moderate negative correlations with homosexuals and bisexuals attitude thermometer measures (rs = –.36 and –.36, respectively), and was positively associated with bias against single people ($r = .58$), benevolent sexism ($r = .49$), and hostile sexism ($r = .49$). These results suggest that the ATA overlaps,

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but is not redundant, with bias against other marginalized social groups. The ATA also demonstrated criterion validity, in that it was associated with lower intention to interact with asexuals ($r = -.53$), and greater intentions to discriminate against asexuals ($r = .43$). Importantly, the ATA also demonstrated incremental validity, in that the ATA was associated with lower intention to interact with asexuals, and greater intentions to discriminate against asexuals, over and above singlism (i.e., prejudice against single people), and over and above an asexuals attitude feelings thermometer (Hoffarth et al., 2016).

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Exhibit

Attitudes towards Asexuals (ATA) Scale

Below is a series of statements concerning your attitudes toward sexual orientations. For each statement, please indicate the degree of your agreement or disagreement in the scale that is provided. Your immediate response is the one we are most interested in.

	1 Strongly Disagree	2	3	4	5 Neutral	6	7	8	9 Strongly Agree
1. Asexual women are not real women.	○	○	○	○	○	○	○	○	○
2. Asexual men are not real men.	○	○	○	○	○	○	○	○	○
3. Asexuality is probably just a phase.	○	○	○	○	○	○	○	○	○
4. A woman who claims she's "asexual" just hasn't met the right man yet.	○	○	○	○	○	○	○	○	○
5. A man who claims he's "asexual" just hasn't met the right woman yet.	○	○	○	○	○	○	○	○	○
6. Asexual people are sexually repressed.	○	○	○	○	○	○	○	○	○
7. Asexuality simply represents an immature, childlike approach to life.	○	○	○	○	○	○	○	○	○
8. People who identify as "asexual" probably just want to feel special or different.	○	○	○	○	○	○	○	○	○
9. Asexuality is a "problem" or "defect."	○	○	○	○	○	○	○	○	○
10. There is nothing wrong with not having sexual attraction.	○	○	○	○	○	○	○	○	○
11. A lot of asexual people are probably homosexual and in the closet.	○	○	○	○	○	○	○	○	○
12. Asexuality is an inferior form of sexuality.	○	○	○	○	○	○	○	○	○
13. You can't truly be in love with someone without feeling sexually attracted to them.	○	○	○	○	○	○	○	○	○
14. Asexuality should not be condemned.	○	○	○	○	○	○	○	○	○
15. Asexuals who have intimate relationships are being unfair to their partners.	○	○	○	○	○	○	○	○	○
16. I would not be too upset if I found out my child were an asexual.	○	○	○	○	○	○	○	○	○

Attitudes Toward Lesbians and Gay Men Scale

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The Attitudes Toward Lesbians and Gay Men (ATLG) Scale is a brief set of statements expressing condemnation or tolerance toward lesbians and gay men, to which respondents indicate their level of agreement or disagreement. It is used primarily as a measure of sexual prejudice—heterosexuals' negative attitudes toward sexual minorities based on their non-heterosexual attraction, behavior, and social identity (Herek & McLemore, 2013).

Development

The ATLG was developed through extensive psychometric validation studies (Herek, 1984, 1988, 1994). The original scale consisted of 20 statements, 10 about lesbians (the ATL subscale) and 10 different statements about gay men (the ATG subscale). The scores from these original subscales were not directly comparable. Shorter parallel versions have been developed, consisting of three- to five-item subscales. These versions demonstrate high reliability and validity, and strongly correlate with their longer counterparts (*r*s > .95). For most purposes, researchers are advised to use the three-item subscales.

The ATLG was developed for use with adults but has also been administered to adolescents (Poteat & Anderson, 2012). It has been translated into numerous languages (e.g., Herek & Gonzalez-Rivera, 2006) and is being used in a growing number of cultural and national contexts. Since the previous edition (Herek & McLemore, 2011), the ATLG has been translated and adapted for use in Chile (e.g., Barrientos & Cárdenas, 2012), China (Yu, Xiao, & Xiang, 2011), Colombia (Moreno, Herazo, Oviedo, & Campo-Arias, 2015), Croatia (Grabovac, Mustajbegović, & Milošević, 2016), Greece (Papadaki, Plotnikof, & Papadaki, 2013), and Singapore (Detenber, Ho, Neo, Malik, & Cenite, 2013). In the previous edition of the *Handbook* (Herek & McLemore, 2011), we noted scale development and administration in Brazil, Canada, England, the Netherlands, and Turkey.

Response Mode and Timing

The ATLG can be self-administered in electronic or paper-and-pencil format or administered orally by an interviewer. It is accompanied by a Likert-type scale, usually with four, five, seven, or nine response options. For example, a 5-point response scale can be used with *Strongly Disagree* and *Strongly Agree* as anchors, along with a neutral midpoint. When administered orally, four response options are usually offered (*Strongly Disagree, Somewhat Disagree, Somewhat Agree, Strongly Agree*) and respondents can volunteer a neutral response (e.g., *Neither Disagree nor Agree*). Whether or not to include a midpoint is left to the researcher's discretion. Completion time is typically between 30 and 60 seconds per item.

Scoring

The ATL and ATG are scored by assigning numerical values to the verbal response options, for example, 1 = *strongly disagree*, and summing across items for each subscale. For ease of interpretation, these sums can be divided by the total number of subscale items to yield a score that matches the response scale metric. The possible range of scores depends on the response scale used.

Items 1 through 5 comprise the ATG subscale; and Items 6 through 10 comprise the ATL subscale. Items 3, 5, 8, and 10 are reverse scored. The 3-item ATG is composed of Items 1, 2, and 3. The 3-item ATL scale is composed of Items 6, 7, and 8.

Reliability

For the original 20-item scale, alphas are typically greater than .85 in U.S. samples and greater than .80 in non-U.S. samples. For brief versions, typical alphas are greater than .80 (e.g., Lytle, Dyar, Levy, & London, 2017). For non-English versions, typical alphas are greater than .77 for the ATL, greater than .76 the ATG, and greater than .80 when the subscales are combined (e.g., Barrientos & Cárdenas, 2012). Test–retest reliability (*r*s > .80) has been demonstrated with alternate forms (Herek, 1988, 1994).

Validity

The ATLG's construct and discriminant validity are well-established (Herek, 1994; Herek & McLemore, 2013). For example, higher scores (more negative attitudes) are generally associated with high levels of religiosity, lack of interpersonal contact with lesbians and gay men, adherence to traditional gender roles, endorsement of laws and public policy that discriminate against sexual minorities, and negative attitudes toward transgender and gender nonconforming individuals (e.g., Graham, Frame, & Kenworthy, 2014; Norton & Herek, 2010). The ATLG is also strongly correlated with indirect and modern measures of sexual prejudice (e.g., Dasgupta & Rivera, 2006; Morrison & Morrison, 2002).

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Additional Information

Researchers need not obtain permission to use the ATLG in not-for-profit research that is consistent with the American Psychological Association's Ethical Principles of Psychologists.

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Exhibit

Attitudes toward Lesbians and Gay Men

Attitudes toward Gay Men (ATG) Subscale

	1 Strongly Disagree	2 Somewhat Disagree	3 Neither Disagree nor Agree	4 Somewhat Agree	5 Strongly Agree
1. Sex between two men is just plain wrong	○	○	○	○	○
2. I think male homosexuals are disgusting	○	○	○	○	○
3. Male homosexuality is a natural expression of sexuality in men	○	○	○	○	○
4. Male homosexuality is a perversion	○	○	○	○	○
5. Male homosexuality is merely a different kind of lifestyle that should not be condemned	○	○	○	○	○

Attitudes Toward Lesbians (ATL) Subscale

	1 Strongly Disagree	2 Somewhat Disagree	3 Neither Disagree nor Agree	4 Somewhat Agree	5 Strongly Agree
6. Sex between two women is just plain wrong	○	○	○	○	○
7. I think female homosexuals (lesbians) are disgusting	○	○	○	○	○
8. Female homosexuality is a natural expression of sexuality in women	○	○	○	○	○
9. Female homosexuality is a perversion	○	○	○	○	○
10. Female homosexuality is merely a different kind of lifestyle that should not be condemned	○	○	○	○	○

Modern Homonegativity Scale

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The Modern Homonegativity Scale (MHS; Morrison & Morrison, 2003) is a brief measure designed to assess negative attitudes toward gay men and lesbian women. Unlike many measures of homonegativity, items on the MHS do not assess traditional, moral, or religious objections to lesbian women and gay men, but rather objections to members of these social groups based on the following beliefs: (1) gay men and lesbian women are making unnecessary or illegitimate demands for changes to the status quo (e.g., the right to legally wed and to parent an adopted child); (2) discrimination against gay men and lesbian women is a thing of the past; and (3) gay men and lesbian women exaggerate the importance of their sexual orientation and, in so doing, prevent themselves from assimilating into mainstream culture (i.e., they are responsible for their own marginalization given their participation in events and activities that "flaunt" their otherness such as "Gay Pride" parades).

Development

The MHS is suitable for use with both students (Morrison, Kenny, & Harrington, 2005; Morrison & Morrison, 2003; Morrison, Morrison, & Franklin, 2009) and non-students (Morrison & Morrison, 2011). The MHS items were originally developed via input from members of organizations serving sexual minority men and women, members of academic faculty, and gay, lesbian, and heterosexual graduate students. The 50-item version of the MHS was then distributed to both university and college students. Using specific scale item reduction criteria, principle component analysis, and reliability assessments, the number of items was reduced to a 12-item version (Morrison & Morrison, 2003). Factor analyses conducted on the 12-item MHS indicated that the scale was both unidimensional and conceptually distinct from measures of "old-fashioned" homonegativity (e.g., the Homonegativity Scale; Morrison, Parriag, & Morrison, 1999). There are two parallel forms of the MHS: one focusing on gay men (MHS-G) and the other focusing on lesbian women (MHS-L). Results from Morrison and Morrison (2003) and Morrison and Morrison (2011) indicate that both 12-item forms are reliable (alphas exceeded .90), unidimensional, and construct valid (e.g., total scale scores correlated in anticipated directions with constructs that are theoretically linked such as modern racism, modern sexism, humanitarian-egalitarianism, and the Protestant

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work ethic). Finally, scores on the MHS were not susceptible to floor effects.

Response Mode and Timing

Study participants report the extent to which they agree or disagree with the written MHS items. Participants are given instructions that read "After the statement, please circle the number which best represents your opinion." A 5-point Likert-type response format is often used: 1 (*strongly disagree*), 2 (*disagree*), 3 (*don't know*), 4 (*agree*), and 5 (*strongly agree*). The MHS also has been used with a 7-point Likert-type scale, with no noticeable differences observed with respect to its psychometric properties. On average, participants take less than 5 minutes to complete the MHS.

Scoring

Total scale scores are calculated by summing participants' responses across all MHS items. If researchers are using a 5-point Likert-type response format, for example, the possible range of scores is 12 (a lower-scoring participant) to 60 (a higher-scoring participant). Items 1, 5, and 7 on the MHS-G are reverse-scored, and Items 7, 11, and 12 on the MHS-L are reverse-scored. Calculation of subscale or factor scores is not applicable to the MHS.

Select items on the MHS-G and MHS-L were identified as invariant between Canadian and American samples of university students (Morrison et al., 2009).

Reliability

Using student and non-student samples, Cronbach's alpha coefficients for the MHS have been consistently high. Specifically, they have ranged from .81 to .95 (MHS-G) and .84 to .91 (MHS-L; Morrison & Morrison, 2003; Morrison et al., 2009).

Validity

When used with Canadian, American, British, and Irish university students, the construct validity of the MHS has been demonstrated via associations between modern homonegativity and political conservatism, religious behaviour, religious self-schema, religious fundamentalism, social dominance, nationalism, modern and neosexism, traditional and neoracism, humanitarian-egalitarianism, motivation to control prejudiced reactions, interpersonal contact, anti-fat attitudes, and prejudice toward Aboriginal men and women (Morrison & Morrison, 2003, 2011; Morrison et al., 2005, 2009; Morrison, Morrison, Harriman, & Jewell, 2008). Further, responses to the MHS do not appear to correlate significantly with social desirability bias (Morrison & Morrison, 2003). A series of confirmatory factor analyses also provided evidence of discriminant validity, with MHS items loading on a different factor than items taken from a popular measure of old-fashioned homonegativity (Morrison et al., 2009). Fit statistics for this two-factor model were superior to those obtained for a unidimensional model. Finally, behavioural studies (Morrison & Morrison, 2003, 2011) offered additional evidence of construct validity, with significant differences emerging between higher- and lower-scoring participants on the MHS in terms of the degree to which they socially distanced themselves from a lesbian or gay individual and supported the candidacy of a gay man running for political office.

Other Information

The MHS is available for use by any individual conducting research in accordance with the American Psychological Association's Ethical Principles for Psychologists. Individuals wishing to use the MHS can do so without obtaining permission from the authors.

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Exhibit

Modern Homonegativity Scale

Gay Men Version

Please indicate the extent to which you agree with the following statements.

	1 Strongly Disagree	2 Disagree	3 Don't Know	4 Agree	5 Strongly Agree
1. Gay men do not have all the rights they need.	○	○	○	○	○
2. Gay men have become far too confrontational in their demand for equal rights.	○	○	○	○	○
3. Gay men should stop shoving their lifestyle down other people's throats.	○	○	○	○	○
4. Gay men seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same.	○	○	○	○	○
5. Gay men who are "out of the closet" should be admired for their courage.	○	○	○	○	○
6. Many gay men use their sexual orientation so that they can obtain special rights and privileges.	○	○	○	○	○
7. Gay men still need to protest for equal rights.	○	○	○	○	○
8. In today's tough economic times, Canadians' tax dollars shouldn't be used to support gay men's organizations.	○	○	○	○	○
9. The notion of universities providing undergraduate degrees in Gay and Lesbian Studies is ridiculous.	○	○	○	○	○
10. Gay men should stop complaining about the way they are treated in society, and simply get on with their lives.	○	○	○	○	○
11. Celebrations such as "Gay Pride Day" are ridiculous because they assume that an individual's sexual orientation should constitute a source of pride.	○	○	○	○	○
12. If gay men want to be treated like everyone else, then they need to stop making such a fuss about their sexuality/culture.	○	○	○	○	○

Lesbian Women Version

Please indicate the extent to which you agree with the following statements.

	1 Strongly Disagree	2 Disagree	3 Don't Know	4 Agree	5 Strongly Agree
1. The notion of universities providing undergraduate degrees in Gay and Lesbian Studies is ridiculous.	○	○	○	○	○
2. Celebrations such as "Gay Pride Day" are ridiculous because they assume that an individual's sexual orientation should constitute a source of pride.	○	○	○	○	○
3. Lesbian women should stop shoving their lifestyle down other people's throats.	○	○	○	○	○
4. Lesbian women seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same.	○	○	○	○	○
5. Many lesbian women use their sexual orientation so that they can obtain special rights and privileges.	○	○	○	○	○

6. Lesbian women have become far too confrontational in their demand for equal rights.	○	○	○	○	○
7. Lesbian women who are "out of the closet" should be admired for their courage.	○	○	○	○	○
8. In today's tough economic times, Canadians' tax dollars shouldn't be used to support lesbian organizations.	○	○	○	○	○
9. If lesbians want to be treated like everyone else, then they need to stop making such a fuss about their sexuality/culture.	○	○	○	○	○
10. Lesbian women should stop complaining about the way they are treated in society, and simply get on with their lives.	○	○	○	○	○
11. Lesbian women still need to protest for equal rights.	○	○	○	○	○
12. Lesbian women do not have all the rights they need.	○	○	○	○	○

Homophobia Scale

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Henry E. Adams, *University of Georgia*
Jeffrey Bernat, *University of Georgia*

The Homophobia Scale (HS) was developed to assess the cognitive, affective, and behavioral components of homophobia (Wright, Adams, & Bernat, 1999).

Development

The majority of the homophobia scales developed prior to the HS measured attitudes toward gay and lesbian individuals and what has been referred to as homonegativity but did not capture the entire construct of homophobia. The inclusion of items that assess social avoidance and aggressive acting out, in addition to the attitudinal items found on many homophobia measures, differentiates the HS from other scales.

The scale contains three factors that accounted for 68.69 percent of the variance. The first factor, *Behavioral/Negative Affect*, accounted for 40.88 percent of the scale's variance and contained 10 items that assess primarily negative affect and avoidance behaviors. The mean score for Factor 1 = 10.79 (*SD* = 8.22). The second factor, *Affect/Behavioral Aggressive*, accounted for 23.05 percent of the scales' variance and contained 10 items that assess primarily aggressive behavior and negative affect. The mean score for Factor 2 = 14.28 (*SD* = 12.51). The third factor, *Cognitive Negativism*, accounted for 4.77 percent of the scale's variance and contained five items that assess negative attitudes and cognitions. The mean score for Factor 3 = 7.10 (*SD* = 4.84). The article describing the development of the HS has been referenced in 202 publications as of March 2017. It has been translated into Italian and revalidated by Ciocca et al. (2015).

Response Mode and Timing

The HS consists of 25 statements to which respondents answer on a five-point Likert scale of 1 (*strongly agree*) to 5 (*strongly disagree*). Respondents indicate their level of agreement or disagreement with the statements by selecting the response that most closely matches their thought, feelings, or behavior. The scale can be completed in approximately 5–7 minutes.

Scoring

A total score and three subscale scores can be calculated for the scale.

1. Reverse score the following items: 1, 2, 4, 5, 6, 9, 12, 13, 14, 15, 17, 19, 21, 23, 24, 25 (to reverse score the items 1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1). Use the reverse scores to calculate total score and factor subscale scores.
2. To calculate the total score: Add the responses to items 1 to 25; then subtract 25 from the total scale score. The range of scores will be between 0 and 100, with a score of 0 being the least homophobic and 100 being the most homophobic.

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3. To calculate the subscale (factor) scores:

   Factor 1 *Behavior/Negative Affect*: Add Items 1, 2, 4, 5, 6, 7, 9, 10, 11, and 22; then subtract 10. Scores should range between 0 and 40.

   Factor 2 *Affect/Behavioral Aggression*: Add Items 12, 13, 14, 15, 17, 19, 21, 23, 24, and 25; then subtract 10. Scores should range between 0 and 40.

   Factor 3 *Cognitive Negativism*: Add Items 3, 8, 16, 18, and 20; then subtract 5. Scores should range between 0 and 20.

Reliability

The participants for the development and validation studies (N = 321 for the initial field trials and N = 122 for the test–retest reliability) were students from a large Midwestern university. Their average age was 22.38 (SD = 4.12). The mean total score for the scale based on 145 participants was 32.04 (SD = 19.76). The mean score for the male participants (n = 47) was 41.38 (SD = 19.32). The mean score for the female participants (n = 98) was 27.56 (SD = 18.44). It is recommended that users of the scale conduct statistics on their samples to determine cut scores for high and low responding.

The scale yielded an overall alpha reliability coefficient of $r = .94$, $p < .01$ and a 1-week test–retest reliability coefficient of $r = .96$, $p < .01$.

Validity

Concurrent validity was established using the Index of Homophobia (IHP; Hudson & Ricketts, 1980). A Pearson correlation coefficient was computed using overall scores for the IHP and the HS. The results yielded a significant correlation, $r = .66$, $p < .01$, indicating the two scales are measuring a similar construct. The moderately strong correlation suggests the HS measures something different than the IHP.

Other Information

Appropriate citation of the scale (Wright, Adams, & Bernat, 1999) is requested.

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Exhibit

Homophobia Scale

This questionnaire is designed to measure your thoughts, feelings, and behaviors, with regard to homosexuality. It is not a test, so there are no right or wrong answers. Answer each item by circling the number after each question as follows:

	1 Strongly Agree	2 Agree	3 Neither Agree nor Disagree	4 Disagree	5 Strongly Disagree
1. Gay people make me nervous.	○	○	○	○	○
2. Gay people deserve what they get.	○	○	○	○	○
3. Homosexuality is acceptable to me.	○	○	○	○	○
4. If I discovered a friend was gay I would end the friendship.	○	○	○	○	○
5. I think homosexual people should not work with children.	○	○	○	○	○
6. I make derogatory remarks about gay people.	○	○	○	○	○
7. I enjoy the company of gay people.	○	○	○	○	○
8. Marriage between homosexual individuals is acceptable.	○	○	○	○	○
9. I make derogatory remarks like "faggot" or "queer" to people I suspect are gay.	○	○	○	○	○
10. It does not matter to me whether my friends are gay or straight.	○	○	○	○	○
11. It would not upset me if I learned that a close friend was homosexual.	○	○	○	○	○
12. Homosexuality is immoral.	○	○	○	○	○
13. I tease and make jokes about gay people.	○	○	○	○	○

14. I feel that you cannot trust a person who is homosexual.	○	○	○	○	○
15. I fear homosexual persons will make sexual advances towards me.	○	○	○	○	○
16. Organizations which promote gay rights are necessary.	○	○	○	○	○
17. I have damaged property of gay persons, such as "keying" their cars.	○	○	○	○	○
18. I would feel comfortable having a gay roommate.	○	○	○	○	○
19. I would hit a homosexual for coming on to me.	○	○	○	○	○
20. Homosexual behavior should not be against the law.	○	○	○	○	○
21. I avoid gay individuals.	○	○	○	○	○
22. It does not bother me to see two homosexual people together in public.	○	○	○	○	○
23. When I see a gay person I think, "What a waste."	○	○	○	○	○
24. When I meet someone I try to find out if he/she is gay.	○	○	○	○	○
25. I have rocky relationships with people that I suspect are gay.	○	○	○	○	○

27 Sexual Scripts and the Sexual Double Standard

Double Standard Scale

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The purpose of the Double Standard Scale is to measure acceptance of the traditional sexual double standard. Researchers have used the Double Standard Scale to explore a number of different topics. For example, researchers have used this scale to examine how adherence to the sexual double standard might correlate with coercion and intimate partner violence (Cvancara & Kinney, 2009), expectations for adolescent behaviors (Emmerink, Vanwesenbeeck, van den Eijnden, & ter Bogt, 2016), perceptions of virginity (Eriksson & Humphreys, 2014), the amount and quality of sexual communication (Greene & Faulkner, 2005), relationship satisfaction and consenting to unwanted sex (Kennett, Humphreys & Bramley, 2013), rape-supportive attitudes and intimate partner violence (Sierra, Bermúdez, Buela-Casal, Salinas, & Monge, 2014; Sierra, Santos-Iglesias, Gutiérrez-Quintanilla, Bermúdez, & Buela-Casal, 2010), and adolescents' exposure to sexual music videos (Zhang, Miller & Harrison, 2008).

Development

Ten items were generated based on a review of the literature. The scale was assessed initially by asking college men and women (N = 330) about their acceptance of the traditional sexual double standard (Caron et al., 1993).

Response Mode and Timing

The Double Standard Scale consists of 10 items arranged in a 5-point Likert-type format with resonse options labeled from 1 (*strongly agree*) to 5 (*strongly disagree*). Respondents indicate the number corresponding to their answer. The scale requires an average of 5 minutes for completion.

Scoring

A total score for the instrument is obtained by summing each of the item scores, including reversing the negative (Item 8). Scores can range from 10 to 50 points. A lower score indicates a greater adherence to the traditional double standard.

Reliability

In a sample of 330 college men and women (Caron, Davis, Halteman, & Stickle, 1993), the Cronbach alpha for the summed scores from the 10 items was .72.

Validity

In addition to the face validity of the questions, Caron et al. (1993) obtained results consistent with expectations about how those men and women who held a double standard would behave regarding some aspects of condom use.

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Exhibit

Double Standard Scale

Please select your response to the following questions about your attitudes about the sex roles of men and women. Please keep in mind that there are no right or wrong answers. Please answer honestly.

	1 Strongly agree	2 Agree	3 Undecided	4 Disagree	5 Strongly disagree
1. It is expected that a woman be less sexually experienced than her partner.	○	○	○	○	○
2. A woman who is sexually active is less likely to be considered a desirable partner.	○	○	○	○	○
3. A woman should never appear to be prepared for a sexual encounter.	○	○	○	○	○
4. It is important that the men be sexually experienced so as to teach the women.	○	○	○	○	○
5. A "good" woman would never have a one-night stand, but it is expected of a man.	○	○	○	○	○
6. It is important for a man to have multiple sexual experiences in order to gain experience.	○	○	○	○	○
7. In sex the man should take the dominant role and the woman should assume the passive role.	○	○	○	○	○
8. It is acceptable for a woman to carry condoms.	○	○	○	○	○
9. It is worse for a woman to sleep around than it is for a man.	○	○	○	○	○
10. It is up to the man to initiate sex.	○	○	○	○	○

Scale for the Assessment of Sexual Standards among Youth

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The 19-item Scale for the Assessment of Sexual Standards among Youth (SASSY) measures Sexual Double Standard (SDS) Endorsement, defined as: the degree to which an individual's attitude reflects a divergent set of expectations for boys and girls; specifically, that boys are expected to be relatively more sexually

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> active, assertive, and knowledgeable and girls are expected to be relatively more sexually reserved, passive, and inexperienced.
>
> (Emmerink, van den Eijnden, ter Bogt, & Vanwesenbeeck, 2017, p. 1700)

Development

In a contemporary context, the SDS encompasses several other aspects that have been insufficiently highlighted or were absent in previous measures. An abundance of research indicates that SDS endorsement is no longer related only to premarital sex and virginity status, but relevant in numerous domains, such as number of sexual partners, sexual desire, sexual initiation, sexual skills and knowledge, and more (Emmerink et al., 2017). We therefore chose to reflect the multifaceted nature of the contemporary SDS in the item pool of the instrument. The proposed scale items were designed with older SDS measures in mind—such as Traditional Sexual Attitudes (Kiefer & Sanchez, 2007), Gender-Equitable Men Scale (Pulerwitz & Barker, 2008), Male Role Attitudes Scale (Pleck, Sonenstein, & Ku, 1994), Double Standard Scale (Caron, Davis, Halteman, & Stickle, 1993), and Sexual Double Standard Scale (SDSS; Muehlenhard & Quackenbush, 1998)—as well as based on empirically and theoretically derived insights from the SDS literature. We made sure to design items that would be suitable for assessment among heterosexual male and female adolescents and emerging adults (i.e., no difficult wording, not many items describing marriage).

Exploratory factor analysis using principal axis factoring with oblique rotation was used to assess the factor structure of the 35 generated items. The Kaiser–Meyer–Oklin value was .88, and Bartlett's Test of Sphericity was statistically significant, supporting factorability. Furthermore, upon inspection of the scree plot, a break could be seen after the first component extracted. We excluded the 11 items that did not load > .40 on the first factor. Next, an analysis of internal consistency was conducted with the remaining 24 items, which indicated that removing an additional four items would greatly increase internal consistency. This yielded a Cronbach's alpha of .90 for the 20-item instrument. Finally, the factor analysis was repeated, confirming a single-factor solution which explained 34 percent of the variance (Emmerink et al., 2017).

A new study (see Table 1, Study 3, Waves 1 & 2) was conducted to assess psychometric properties of the SASSY (Emmerink et al., 2017). A confirmatory factor analysis with principal axis factoring was conducted, yielding a Kaiser–Meyer–Oklin value of .91 for both Wave 1 and Wave 2. Bartlett's Test of Sphericity was statistically significant in both waves, supporting factorability. The analysis showed that all items, except one, loaded > .40 on the first factor in both Wave 1 and Wave 2, supporting a one-factor solution. The item, which was subsequently excluded, was "Girls like boys who take the lead in sex." The single factor of the final 19-item instrument explained

TABLE 1
Summary of Existing Samples Using the SASSY

Sample		Reliability (α)	Specifics
Study 1 ($N = 465$)[a] Recruitment through paid online panel: Community sample of 16–20-year-olds (Ethnically diverse)	SDS endorsement Men $M = 2.97$, $SD = .85$ Women $M = 2.79$, $SD = .71$ $t(463) = 2.50$, $p < .05$	.90	20-item instrument; One item was dropped in the final scale
Study 2 ($N = 293$)[b] Online recruitment through social media: Convenience sample of 18–25-year-olds	SDS endorsement Men: $M = 2.38$, $SD = .69$ Women: $M = 2.23$, $SD = .71$ $F(1,291) = 3.86$, *ns*	.88	19-item scale as reported in this handbook
Study 3 Wave 1 ($N = 818$)[c] Recruitment through paid online panel: Community sample of 16–25-year-olds	SDS endorsement Men: $M = 2.29$, $SD = .78$ Women: $M = 2.12$, $SD = .65$ $d = .24$, $p < .01$	.89	19-item scale as reported in this handbook
Study 3 Wave 2 ($N = 616$)[c] Recruitment through paid online panel: Community sample of 16–25-year-olds	SDS endorsement Men: $M = 2.28$, $SD = .78$ Women: $M = 2.09$, $SD = .67$ $d = .28$, $p < .01$	.90	19-item scale as reported in this handbook

Note. All samples are Dutch.
[a](Emmerink, Vanwesenbeeck, van den Eijnden, & ter Bogt, 2015; Emmerink et al., 2017)
[b](Emmerink, van den Eijnden, Vanwesenbeeck, & ter Bogt, 2016; Emmerink et al., 2017)
[c](Emmerink et al., 2017)

32 percent of the variance in Wave 1 and 34 percent of the variance in Wave 2.

The original Dutch item wording can be obtained from the corresponding author on request.

Response Mode and Timing

The measure can be completed on a computer or using paper-and-pencil in approximately 5 minutes. Participants indicate their agreement with the items on a 6-point scale from 1 (*completely disagree*) to 6 (*completely agree*), with scale anchors labeled *disagree, slightly disagree, slightly agree* and *agree* in between these endpoints. The scale is preceded by a short introduction. We asked participants to disregard any current relationships specifically when filling out the measure.

Scoring

No items are reversed scored and there are no subscales within the measure. The 19 items are averaged to create a total SDS Endorsement score. Higher scores indicate greater endorsement. Sample means range from 2.09 to 2.97 (see Table 1). We tend to find slightly but significantly higher SDS endorsement among men than among women (see Table 1).

Reliability

Across diverse samples of young people, varying in age between 16 and 25 years of age from well-balanced community samples or convenience samples, our measure shows consistent reliability, with Cronbach's alpha values ranging from $\alpha = .88$ to $\alpha = .90$. Test–retest reliability assessed after a period of 2 months ($N = 616$) revealed a between-wave correlation of $r = .70$ ($p < .01$) and within-gender scores on the SASSY did not significantly differ between waves.

Validity

Construct validity was sufficient with a high correlation between SASSY and the SDSS of $r = .53$, $p < .01$ at Wave 1. Convergent validity was sufficient; a small positive correlation was found between SASSY and a scale measuring Family Gender Roles (Wave 1, $r = .21$, $p < .01$; Wave 2, $r = .23$, $p < .01$), indicating that increased SDS endorsement was related to more conservative family gender norms (towards women). A moderate positive correlation was found between SASSY and a scale measuring Traditional Values (Wave 1, $r = .38$, $p < .01$; Wave 2, $r = .39$, $p < .01$), indicating that increased SDS endorsement was related to more conservative gender norms for roles in child-rearing.

Measurement (in)variance was examined across time, gender, age, education, sexual experience level, and ethnicity using confirmatory factor analysis. We assessed configural invariance (requires that model fit is acceptable across groups), metric invariance (requires that factor loadings are invariant across groups), and scalar (or strong) invariance (requires that item intercepts are invariant across groups), as proposed by Steenkamp and Baumgartner (1998). The fit of the factor model was good; $\chi^2(131) = 449.518$, RMSEA = .055 ($p_{\text{close fit}} = .077$) and CFI = .932. All factor loadings were > .41. The instrument showed configural and metric measurement invariance across gender, age, educational level, sexual experience level, and ethnicity, and configural, metric, and scalar measurement invariance across time.

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Exhibit

Scale for the Assessment of Sexual Standards Among Youth

Below you will find a number of statements about boys and girls concerning sexuality. The statements refer to boys and girls, but they are also meant for young men and women. Please read the statements carefully and respond whether you agree with each statement or not. We are only interested in your honest opinion, there are no right or wrong answers.

	Completely Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Completely Agree
1. Once a boy is sexually aroused, a girl cannot really refuse sex anymore.	○	○	○	○	○	○
2. I think that a girl who takes the initiative in sex is pushy.	○	○	○	○	○	○
3. I think it is more appropriate for a boy than for a girl to date different people at the same time.	○	○	○	○	○	○
4. Girls should act in a more reserved way concerning sex than boys.	○	○	○	○	○	○
5. I think it is more appropriate for a boy than for a girl to have sex without love.	○	○	○	○	○	○
6. A boy should be more knowledgeable about sex than a girl.	○	○	○	○	○	○
7. I think sex is less important for girls than for boys.	○	○	○	○	○	○
8. I think it is normal for boys to take the dominant role in sex.	○	○	○	○	○	○
9. I think sexually explicit talk is more acceptable for a boy than for a girl.	○	○	○	○	○	○
10. Sometimes a boy should apply some pressure to a girl to get what he wants sexually.	○	○	○	○	○	○
11. It is more important for a girl to keep her virginity until marriage than it is for a boy.	○	○	○	○	○	○
12. Boys are more entitled to sexual pleasure than girls.	○	○	○	○	○	○
13. It is not becoming for a girl to have unusual sexual desires.	○	○	○	○	○	○
14. Sex is more important for boys than for girls.	○	○	○	○	○	○
15. It is more important for a girl to look attractive than it is for a boy.	○	○	○	○	○	○
16. Boys and girls want completely different things in sex.	○	○	○	○	○	○
17. I think cheating is to be expected more from boys than from girls.	○	○	○	○	○	○
18. I think it is important for a boy to act as if he is sexually active, even if it is not true.	○	○	○	○	○	○
19. I think it is more appropriate for a boy than for a girl to masturbate frequently.	○	○	○	○	○	○

Indicators of a Double Standard and Generational Difference in Sexual Attitudes

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The Indicators of a Double Standard and Generational Difference in Sexual Attitudes measure was developed by Weinberg as part of a 1992 comparative study of sexual attitudes and behaviors of university students in the United States and Sweden. Compared to the United States, Sweden is considered a much more homogeneous society and the double standard of sexuality is also thought to be less evident in Sweden (see Reiss, 1980; Weinberg, Lottes, & Shaver, 1995). Thus, the Indicators were used to test these expectations. In general, the Indicators can be used to assess the perceived heterogeneity of sexual attitudes of a population by generation and gender or to compare two or more populations with respect to such generational and gender differences.

Because the evaluation of parent and peer sexual attitudes is provided by respondents, not respondents' parents and peers, this instrument should be regarded as providing indirect measures of a lack of homogeneity—a perception of a double standard and/or a generational difference in sexual attitudes. When evaluating a double standard of sexual behavior, researchers often ask the same respondents identical questions about acceptable sexual behavior for women and men. These types of questions make it obvious to respondents that female/male comparisons may be made, and respondents influenced by "social desirability" and "political correctness" pressures may be careful to put the same response to corresponding pairs of female/male questions. We believe that the wording of items of the Indicators make such a social desirability bias less likely because it is less obvious that comparisons to assess a double standard will be made. The Indicators of sexual attitudes would be appropriate to administer to high school or university students.

Response Mode and Timing

The Indicators of sexual attitudes consist of six five-point Likert-type items. For each item, respondents compare their sexual attitudes to those of their mother, father, close female friends, close male friends, female students their own age, and male students their own age. The response options for each item are that the specified individual(s) is (are): 1 (*much more liberal*), 2 (*slightly more liberal*), 3 (*the same*), 4 (*slightly more conservative*), or 5 (*much more conservative*). Respondents indicate the number from 1 to 5 corresponding to their rating of the similarity of their sexual attitudes to those of their parent or peer group. This takes less than five minutes to complete.

Scoring

In a society characterized by the traditional double standard of sexual behavior, men are subjected to more permissive or liberal sexual norms than women. In such a society we would expect the sexual attitudes of men to be more liberal than the sexual attitudes of women. In operationalizing the double standard, we assume that if sexual attitudes of women and men are judged to be similar with respect to a liberal/conservative dimension, then this will indicate lack of support for a double standard. If the sexual attitudes of men are judged to be more liberal than women, then this will indicate a male-permissive double standard; similarly, if the attitudes of women are judged to be more liberal than men, then this will indicate a female-permissive double standard.

For ease of interpretation and also to identify the extent of more substantial or "real" generational and gender differences in sexual attitudes, responses to the six items were recoded as follows: 1 to –1, 2 to 0, 3 to 0, 4 to 0, and 5 to 1. With this coding, a minus one indicates that a respondent rated a parent or peer group to have sexual attitudes *much more liberal* than his/her own attitudes and a plus one indicates that a respondent rated a parent or peer group to have sexual attitudes *much more conservative* than his/her own attitudes. A zero indicates that a respondent rated a parent or peer group to have sexual attitudes similar to his/ her own where "similar" includes the two *slightly more liberal* or *slightly more conservative* responses and *the same* response.

To assess the extent of a double standard of sexual behavior for women and men, three new variables—D_{parent}, D_{friend}, and $D_{student}$—are created by taking the difference of corresponding female and male items. Using the aforementioned variable names, D_{parent} equals Mother – Father, D_{friend} equals $F_{friend} - M_{friend}$, and $D_{student}$ equals $F_{student} - M_{student}$. Shown in Table 1 are the possible numerical values of these three double standard difference variables. A value of 0 for a double standard difference variable indicates a similar rating of sexual attitudes for a pair of female/male

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TABLE 1
Variable Values and Difference Variable Interpretation

Female variable	Male variable	Difference variable[a]	Interpretation of difference variables
Mother	Father	D_{parent}	
F_{friend}	M_{friend}	D_{friend}	
$F_{student}$	$M_{student}$	$D_{student}$	
Values	Values	Values	
–1	1	–2	Female more liberal, female-permissive double standard
–1	0	–1	Female more liberal, female-permissive double standard
0	1	–1	Female more liberal, female-permissive double standard
–1	–1	0	Egalitarian, no double standard
0	0	0	Egalitarian, no double standard
1	1	0	Egalitarian, no double standard
0	–1	1	Male more liberal, male-permissive double standard
1	0	1	Male more liberal, male-permissive double standard
1	–1	2	Male more liberal, male-permissive double standard

[a]The difference variable equals the female variable minus the male variable.

variables and is interpreted as an indicator of egalitarian sexual attitudes and no double standard. A negative difference (of –1 or –2) indicates that women's sexual attitudes were rated more liberal than those of men—a female-permissive double standard. A positive difference (of 1 or 2) indicates that men's sexual attitudes were rated more liberal than those of women—an indicator of a male-permissive double standard.

Reliability

Principal components factor analyses were performed on the six items using all five of the original responses with samples of male and female university students in the United States and Sweden. Factor analyses for each of the four country/gender groups revealed two factors—a parental factor composed of the mother and father items and a peer factor composed of the four friend and student items. For samples of male university students in the United States and Sweden, Cronbach alphas for the parental factor were .60 and .80, respectively; for these samples, Cronbach alphas for the peer factor were .85 and .84, respectively. For samples of female university students in the United States and Sweden, Cronbach alphas for the parental factor were .64 and .77, respectively; for these samples, Cronbach alphas for the peer factor were both .78.

Validity

Construct validity of the Indicators of a Double Standard and Generational Difference in Sexual Attitudes was supported by significant differences in the predicted direction for groups of Swedish and American university students. Greater proportions of Swedish than American students responded in the similar category. Between 77 and 89 percent of Swedish students rated their parents' sexual attitudes as similar to their own compared to between 54 and 65 percent for American students. Thus, these findings support the view that with respect to sexual attitudes, Sweden is a more homogeneous society, characterized by less of a generational difference in such attitudes than the United States. With respect to parents' sexual attitudes, the proportion rated *much more conservative* was higher than the proportion rated *much more liberal* (especially for Americans).

Between 80 and 94 percent of Swedish students rated their male peers as having sexual attitudes similar to their own compared to between 55 and 79 percent for American students. For comparison with male peers, there were higher homogeneity ratings for Sweden than for the United States, as expected. For ratings of male peer sexual attitudes, non-similar responses for each country and gender tended to occur in the *much more liberal* rather than *much more conservative* category. For comparisons with female peer sexual attitudes, similar responses were high for all four country/gender groups. Thus, with respect to comparisons with female peers, the expectation regarding greater homogeneity in Sweden was only partially supported. A greater proportion of Swedish women (88%) compared to American women (78%) rated female students their own age as having sexual attitudes similar to their own. But no greater homogeneity was found in ratings of close female friends. Over 90 percent of all country/gender groups rated the sexual attitudes of their close female friends as similar to their own.

For the mother-father comparison, a higher proportion of American males rated their mother as having *much more conservative* sexual attitudes than their father than rated their mother as having *much more liberal* attitudes than their father (27% vs. 10%). For the double standard variables involving gender differences for friends and students, all four country/gender groups reported a higher proportion of *much more conservative* female peers than *much more liberal* female peers. However, the ratings of *much more conservative* female peers and the difference between the *much more conservative* and *much more liberal* ratings were larger for the American students than for the Swedish students. These findings support the expectation that a male-permissive double standard of sexual behavior is more prevalent in the United States. Nevertheless, about three fourths of American students and over 90 percent of Swedish students gave similar evaluations of the sexual attitudes of male and female peers. Thus, only a minority of respondents in both countries (less than 10% in Sweden and about 25% in the United States) indicated perception of a male-permissive double standard of sexual attitudes.

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Exhibit

Indicators of a Double Standard and Generational Difference in Sexual Attitudes

Select the response that corresponds to your answer. Do you think the sexual attitudes of the following people are more liberal or conservative than your own?

	1 Much more liberal	2 Slightly more liberal	3 The same	4 Slightly more conservative	5 Much more conservative
1. Mother	○	○	○	○	○
2. Father	○	○	○	○	○
3. Close female friends	○	○	○	○	○
4. Close male friends	○	○	○	○	○
5. Female students your own age	○	○	○	○	○
6. Male students your own age	○	○	○	○	○

Sexual Double Standard Scale

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We developed the Sexual Double Standard Scale (SDSS; Muehlenhard & Quackenbush, 1996) to assess respondents' acceptance of the traditional sexual double standard (SDS), in which women's sexual behavior is evaluated more negatively than the same behavior by men (Crawford & Popp, 2003; Muehlenhard, Sakaluk, & Esterline, 2015; Reiss, 1960). It focuses on sex outside of committed relationships, sex with multiple partners, and sex at a young age.

Development

The essence of the double standard is the differential evaluation of women's and men's sexual behavior. Thus, we created two types of items: Six items compare women and men within the same item (e.g., "A man should be more sexually experienced than his wife," keyed positively; "It is just as important for a man to be a virgin when he marries as it is for a woman," keyed negatively). Twenty items involve pairs, with parallel items about women's and men's sexual behavior (e.g., Item 11, "A woman who initiates sex is too aggressive," Item 26, "A man who initiates sex is too aggressive").

Response Mode and Timing

Respondents indicate their agreement with each of the 26 items using a 4-point scale from *disagree strongly* (0) to *agree strongly* (3). It takes about 5 minutes and can be administered on paper or online.

Some researchers have modified the scale to meet their needs. For example, Lefkowitz, Shearer, Gillen, and Espinosa-Hernandez (2014) used a 17-item shortened version and a (1) to (4) response scale.

Scoring

The SDSS total score is calculated as follows: Total = Item 4 (reverse scored) + Item 5 (reverse scored) + Item

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8 (reverse scored) + Item 1 + Item 15 + Item 19 + (Item 2 − Item 24) + (Item 12 − Item 3) + (Item 10 − Item 6) + (Item 17 − Item 7) + (Item 9 − Item 22) + (Item 11 − Item 26) + (Item 13 − Item 18) + (Item 25 − Item 14) + (Item 16 − Item 21) + (Item 20 − Item 23).

In other words, the SDSS is the sum of the three positively keyed (pro-SDS) single items, the three negatively keyed (egalitarian) single items, reverse scored, and the 10 difference scores derived from the 10 pairs of parallel items. Scores can range from 48 (reflecting the traditional SDS) to 0 (reflecting identical standards for men and women, whether restrictive or permissive) to –30 (reflecting a "reverse" SDS, evaluating men more harshly than women).

To calculate *Cronbach's alpha*, first reverse the reverse-scored items (Items 4, 5, and 8). For the items that occur in pairs, use the *difference scores* to calculate alpha, *not the scores of the individual items*. Calculating alpha using 26 item scores—rather than difference scores—would be problematic because the SDS is characterized by differential evaluations of women and men.

Reliability

In a sample of undergraduates (Muehlenhard & Quackenbush, 1996), alpha was .73 for women (n = 463) and .76 for men (n = 255). Published alphas have ranged from .60 to .86, with most between .68 and .74 (Boone & Lefkowitz, 2004; Clarke, Marks, & Lykins, 2015; Sakaluk & Milhausen, 2012; Sakaluk, Todd, Milhausen, Lachowsky, & Undergraduate Research Group in Sexuality, 2014; Walters & Burger, 2013). In previous descriptions of the SDSS, we did not address calculating alpha; thus, it is unclear how different researchers calculated alpha.

Validity

Convergent validity of the SDSS is, in part, demonstrated by its correlations with other scales. SDSS scores were positively correlated with traditional gender role attitudes (Lefkowitz et al., 2014; Muehlenhard & McCoy, 1991); conservative sexual attitudes (Boone & Lefkowitz, 2004); and gendered beliefs about sex (e.g., beliefs that sex is more emotional for women than men, that men have a stronger sex drive than women, and that female sexuality is complex whereas male sexuality is simple; Sakaluk et al., 2014). In a confirmatory factor analyses, the SDSS loaded with other scales (e.g., Hostile Sexism) onto a latent variable that authors labeled as *heteronormative beliefs* (Eaton & Matamala, 2014).

The SDSS has been used to test predictions about how women's sexual behaviors relate to *women's* perceptions of *men's* acceptance of the SDS. In these studies, women were asked to recall a particular sexual situation and then to complete the SDSS the way they thought their male partner would have completed it at the time. Muehlenhard and McCoy (1991) asked about situations in which women had wanted to have sexual intercourse with a new partner and either openly acknowledged their sexual interest or hid their interest, behaving as if they did not want to have sex. Women who reported openly acknowledging their sexual interest rated the man as less accepting of the SDS than did women who reported acting uninterested. Likewise, Muehlenhard and Quackenbush (1996) found that, in first-time intercourse situations, women who had suggested or provided condoms rated their partner as less accepting of the SDS than did women who had engaged in intercourse without suggesting, providing, or using a condom. It seems understandable that women who perceive their partner as accepting the SDS would be reluctant to express sexual interest or suggest/provide condoms, lest they appear too eager or experienced.

Other studies have also found associations between the SDSS and various behaviors. Lefkowitz et al. (2014) found that high SDSS scores were associated with "more sexual partners and fewer perceived barriers to condom use for young men, and more perceived barriers to condom use for young women" (p. 833). Bay-Cheng and Zucker (2007) found that self-identified feminists had significantly lower SDSS scores than those who rejected the feminist label.

In an experimental study, men exposed to "traditional masculinity" images (e.g., a rugby team) scored higher on the SDSS than men exposed to "modern masculinity" images (e.g., men cooking together); men exposed to neutral images were intermediate (Clarke et al., 2015).

Consistent with research showing that, on average, men accept the SDS more than women do (Crawford & Popp, 2003), several studies found that men's SDSS scores were higher than women's (Eaton & Matamala, 2014; Lefkowitz et al., 2014; Sakaluk & Milhausen, 2012).

Finally, the discriminant validity of the SDSS is supported by the nonsignificant, near-zero correlations between SDSS scores and two different measures of socially desirable responding (Sakaluk & Milhausen, 2012).

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Exhibit

Sexual Double Standard Scale

Please indicate the extent to which you agree with the following statements

	Disagree Strongly	Disagree Mildly	Agree Mildly	Agree Strongly
1. It's worse for a woman to sleep around that it is for a man.	○	○	○	○
2. It's best for a guy to lose his virginity before he's out of his teens.	○	○	○	○
3. It's okay for a woman to have more than one sexual relationship at the same time.	○	○	○	○
4. It is just as important for a man to be a virgin when he marries as it is for a woman.	○	○	○	○
5. I approve of a 16-year-old girl's having sex just as much as a 16-year-old boy's having sex.	○	○	○	○
6. I kind of admire a girl who has had sex with a lot of guys.	○	○	○	○
7. I kind of feel sorry for a 21-year-old woman who is still a virgin.	○	○	○	○
8. A woman's having casual sex is just as acceptable to me as a man's having casual sex.	○	○	○	○
9. It's okay for a man to have sex with a woman he is not in love with.	○	○	○	○
10. I kind of admire a guy who has had sex with a lot of girls.	○	○	○	○
11. A woman who initiates sex is too aggressive.	○	○	○	○
12. It's okay for a man to have more than one sexual relationship at the same time.	○	○	○	○
13. I question the character of a woman who has had a lot of sexual partners.	○	○	○	○
14. I admire a man who is a virgin when he gets married.	○	○	○	○
15. A man should be more sexually experienced than his wife.	○	○	○	○
16. A girl who has sex on the first date is "easy."	○	○	○	○
17. I kind of feel sorry for a 21-year-old man who is still a virgin.	○	○	○	○
18. I question the character of a man who has had a lot of sexual partners.	○	○	○	○
19. Women are naturally more monogamous (inclined to stick with one partner) than are men.	○	○	○	○
20. A man should be sexually experienced when he gets married.	○	○	○	○
21. A guy who has sex on the first date is "easy."	○	○	○	○
22. It's okay for a woman to have sex with a man she is not in love with.	○	○	○	○
23. A woman should be sexually experienced when she gets married.	○	○	○	○
24. It's best for a girl to lose her virginity before she's out of her teens.	○	○	○	○
25. I admire a woman who is a virgin when she gets married.	○	○	○	○
26. A man who initiates sex is too aggressive.	○	○	○	○

Token Resistance to Sex Scale

Suzanne L. Osman,[5] *Salisbury University*

The Token Resistance to Sex Scale (TRSS; Osman, 1995) measures the predispositional belief that women use token resistance to sexual advances; saying "no" to sexual advances but meaning "yes." Belief in token resistance is an important determinant of perceptions, opinions, and outcomes of date rape (Muehlenhard, Friedman, & Thomas, 1985; Muehlenhard & Hollabaugh, 1988; Muehlenhard & Linton, 1987; Shotland & Goodstein, 1983). This is the first scale to measure this predispositional belief by examining the situational factors known to be associated with belief in token resistance. Previously, belief in token resistance was measured as a dependent variable by asking questions about whether sexual activity was desired. Now, as a predispositional measure, this scale allows the belief in token resistance to be treated as an independent variable. The TRSS consists of eight items arranged on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Development

Eighty-one male and 105 female undergraduates responded to 20 pretest statements, including one item from Burt's (1980) Acceptance of Interpersonal Violence Scale, designed to relate the situational variables associated with token resistance in the literature to whether a woman wants to have sex. Factor analysis and Cronbach alpha coefficients indicated eight highly intercorrelated items to form the TRSS.

Response Mode and Timing

Respondents select a number from 1 to 7 that corresponds to their agreement with an item. Completion time is less than 5 minutes.

Scoring

All eight items are scored in the same direction and summed. Higher scores indicate stronger belief in token resistance (range from 8 to 56).

Reliability

In the original sample of college students (Osman, 1995), the Cronbach's alpha reliability coefficient for the TRSS was .87 (.86 for men and .77 for women). Subsequently, the alpha has ranged from .80 to .87 in samples of men and women (*N*s of 131 to 541), and .84 for an adapted version measuring belief in men's use of token resistance (Emmers-Sommer, 2016; Osman, 2003, 2004, 2007; Osman & Davis, 1997, 1999a, 1999b).

Validity

Construct validity is supported by stronger belief in token resistance being associated with weaker perceptions of date rape (Osman, 2003; Osman & Davis, 1997, 1999a, 1999b) and sexual harassment (Osman, 2004, 2007). With related measures, the TRSS significantly correlated with Burt's (1980) Sex Role Stereotyping Scale (r = .28, N = 332), and Mosher and Sirkin's (1984) Hypermasculinity Inventory, including Callous Sexual Attitudes (r = .60, N = 332), Danger as Exciting (r = .28, N = 332), and Violence as Manly (r = .28, N = 332) subscales. Of these, the TRSS was the best dispositional predictor of date rape perceptions (Osman & Davis, 1999a). Furthermore, the TRSS significantly correlated as expected with all five subscales of Muehlenhard and Felts's (1998) Sexual Beliefs Scale, including Token Refusal, No Means Stop, Leading on Justifies Force, Men Should Dominate, and Women Like Force (r's = –.26 to .58, N = 199; Osman & Davis, 1997), and Payne, Lonsway, and Fitzgerald's (1999) Illinois Rape Myth Acceptance Scale (r = .84, N = 660; Jozkowski, Sanders, Peterson, Dennis, & Reece, 2014).

In experimentally manipulated scenarios, men with higher TRSS scores attended relatively more to nonverbal cues of sexual availability in their rape judgments, whereas men who scored lower were more sensitive to the victim's verbal refusals (Osman & Davis, 1997). Furthermore, when a woman offered verbal or physical resistance, those with higher TRSS scores had weaker rape and harassment perceptions than those with lower scores (Osman, 2007; Osman & Davis, 1999a). Also, Osman (2003) presented participants with a date rape, consensual sex, or ambiguous scenario. Men with lower TRSS scores had stronger rape perceptions than men with higher scores in only the rape condition, suggesting that verbal refusal to intercourse was not taken seriously by those with higher scores.

Consistent with token resistance being a gendered construct, men have scored higher than women on the TRSS (Emmers-Sommer, 2016; Jozkowski et al., 2014; Jozkowski & Peterson, 2014). Furthermore, women's higher TRSS scores were associated with greater likelihood of engaging in passive sexual behaviors, and lesser likelihood of utilizing verbal messages to communicate consent to penile–vaginal intercourse, whereas men's higher scores were associated with greater likelihood of securing privacy, initiating sex, and feeling more aroused and ready for sex. Finally, TRSS scores decreased immediately following participation in a gamified rape education intervention targeting token resistance and related concepts (Jozkowski & Ekbia, 2015).

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Exhibit

Token Resistance to Sex Scale

Respond to the following statements by indicating the degree to which you agree or disagree with the statement. Respond using the following scale for each statement.

	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided, Neither Agree nor Disagree	5 Slightly Agree	6 Agree	7 Strongly Agree
1. Women usually say "no" to sex when they really mean "yes."	○	○	○	○	○	○	○
2. When a man only has to use a minimal amount of force on a woman to get her to have sex, it probably means she wanted him to force her.	○	○	○	○	○	○	○
3. When a woman waits until the very last minute to object to sex in a sexual interaction, she probably really wants to have sex.	○	○	○	○	○	○	○
4. A woman who initiates a date with a man probably wants to have sex.	○	○	○	○	○	○	○

5. Many times a woman will pretend she doesn't want to have intercourse because she doesn't want to seem too loose, but she's really hoping the man will force her.	○	○	○	○	○	○	○
6. A woman who allows a man to pick her up for a date probably hopes to have sex that night.	○	○	○	○	○	○	○
7. When a woman allows a man to treat her to an expensive dinner on a date, it usually indicates that she is willing to have sex with him.	○	○	○	○	○	○	○
8. Going home with a man at the end of a date is a woman's way of communicating to him that she wants to have sex.	○	○	○	○	○	○	○

Reiss Premarital Sexual Permissiveness Scale (Short Form)

Ira L. Reiss,[6] *University of Minnesota*

This scale measures the level of premarital sexual permissiveness that an individual accepts under various levels of affection. The scale allows one to precisely place a respondent on the cumulative, low to high scale of permissiveness. This newer short form focuses on only the measures of coital permissiveness and consists of just four questions (Reiss, 1989; Schwartz & Reiss, 1995). For the original 12-item scale see Reiss (1964, 1967).

Development

The original scale and the newer short form scale are both Guttman scales i.e., they produce a ladder from low to high permissiveness. The original form consisted of a 12-question scale asking about the person's acceptance of kissing, petting, and intercourse in relationships involving no affection, strong affection, love, or engagement for both men and women (Reiss, 1964, 1967). Underlying the scale is the assumption that in our type of culture the degree of affection is one of the key determinants of what sexual acts will follow. The scale met all Guttman scaling criteria in both a nationally representative sample and several regional samples (Reiss, 1967). I developed the "Autonomy Theory," to explain societal changes in premarital sexual permissiveness (PSP). My predictions of changes regarding PSP have been researched and generally supported (Chiao & Yi, 2013; Hopkins, 2000; Reiss, 1967, 2006, 2015; Reiss & Miller, 1979; Wang, 2004).

In 1989, I composed this simple four-item scale that uses three of the original coital questions and added a fourth question (Reiss, 1989). This scale met all the Guttman scale requirements in both the U.S. and Sweden (Schwartz & Reiss, 1995). The fourth question was added because the old scale lacked a "moderate" affection category. The focus on only coital relationships in this newer short scale derived from the fact that our culture had changed from a minority of young people accepting premarital intercourse to a strong majority of young people accepting and having premarital intercourse (Reiss, 2006, 2015). The reason that the short form questions do not specify if the question is about a male or about a female is that in recent decades there was little difference found between asking these questions for males and for females. Of course, this doesn't mean that there is no double standard in sexuality today. A glance at our society indicates that our politics, our religion, and our economy privilege men over women. Clearly, our culture portrays an increasingly egalitarian long-term trend but we still also display male dominance in many ways. That reality should not be ignored in the study of sexual relationships in any society. In the references below you will find several researchers that sought to measure the double standard in sexuality in a variety of ways (Allison & Risman, 2013; Bordini & Sperb, 2013; Crawford & Popp, 2003; Kreager & Staff, 2009; Sakaluk & Milhausen, 2012, Zuo et al., 2012). My comments on the double standard start in my first book and are present in all my books listed in this paper (Reiss, 1960, 1967, 1986, 2006).

Although this scale focuses on heterosexual penile/vaginal intercourse, a similar scale measuring the role of affection for LGBTQ individuals' permissiveness could be devised. Doing that would likely produce some theoretically valuable comparisons.

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Response Mode and Timing

The short form of the Premarital Sexual Permissiveness Scale (PSP) offers three degrees of agreement and three degrees of disagreement with each question. Participants are asked to consider whether they agree or disagree with the view expressed in the question, and then, to indicate the degree to which they agree or disagree (*strongly, moderately*, or *slightly*). The four questions take only a couple of minutes for almost everyone to answer.

Scoring

Because Guttman scaling has been proven to work on my scales, respondents could simply be scored by dichotomizing their answers into agree or disagree and assigning one point for each question to which they agreed. Dichotomizing each question's answers would yield a total permissiveness scale score for each respondent ranging from a low of 0 to a high of 4. I suggest keeping the six choices in each scale question because some researchers may want to use all six categories. In addition, having six categories does make respondents feel that they can more accurately express their feelings.The wording presented in the PSP asks what is acceptable for "one" and that term includes both the respondent and others. If you wished to know only what the respondent believes is acceptable for her- or himself, then you could change the wording of each question to a more personalized form. For example, you could change Question 1 to read: "I believe that premarital sexual intercourse is acceptable for me if I am in a love relationship." It would be interesting to compare the two different wordings of this scale to see what differences, if any, would be found.

Reliability

Reliability is indicated in that both the original and the short form of the scale always met Guttman Scale criteria, such as the coefficient of reproducibility and the coefficient of scalability. This held up in the U.S. and other countries (Reiss, 1967; Reiss & Miller, 1979; Schwartz & Reiss, 1995).

Validity

Construct validity was established by finding the expected differences between parents and college students, white people and black people, and males and females (Bancroft, Long, & McCabe, 2011; Crawford & Popp, 2003; Earle et al., 2007; Huang & Uba, 1992; Liao & Tu, 2006; Reiss, 1967; Schwartz & Reiss, 1995). Using the short form, the results in Swedish and American college students fit precisely with what was expected—Swedish students were more acceptant of Question 4 (coitus "without much affection") than were U.S. students.

Other Information

In the last six decades, the Reiss PSP scale, in the original or short form, has been widely used. For those doing research today in Western societies, I would recommend using the newer short form of the scale. The focus on coitus is important today given our concerns for pleasure and affection and our desire to avoid unwanted outcomes. The short form incorporates the affectionate theoretical structure of the original scale, and it can be compared to earlier results on coital questions with confidence that it is measuring the same thing as the original. I give my permission to use this scale in future research projects, but I would appreciate knowing your results.

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Exhibit

Reiss Premarital Sexual Permissiveness Scale (Short Form)

The following four questions concern your personal attitude regarding premarital sexual intercourse. First decide whether you agree or disagree with the view expressed; then indicate the level of your agreement or disagreement by selecting the answer that best expresses your view.

	Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree
1. I believe that premarital sexual intercourse is acceptable if one is in a love relationship.	○	○	○	○	○	○
2. I believe that premarital sexual intercourse is acceptable if one is in a relationship involving strong affection.	○	○	○	○	○	○
3. I believe that premarital sexual intercourse is acceptable if one is in a relationship involving moderate affection.	○	○	○	○	○	○
4. I believe that premarital sexual intercourse is acceptable even if one is in a relationship without much affection.	○	○	○	○	○	○

Sexual Scripts Scale

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Robin R. Milhausen, *University of Guelph*
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We developed the Sexual Scripts Scale (SSS; Sakaluk, Todd, Milhausen, Lachowsky, & Undergraduate Research Group in Sexuality, 2014) to assess attitudes and beliefs regarding gendered cultural scenarios pertaining to heterosexual sexuality (Simon & Gagnon, 1986; Wiederman, 2005). The SSS is composed of 32 items mapping onto six different factors. Items for the *Sexual Standards* factor (Items 1–9) assess participants' attitudes towards sexually permissive behavior for both men and women. Items for the *Sexual Simplicity/Complexity* factor (Items 10–16) reflect participants' beliefs about the extent to which female sexuality is more complex relative to male sexuality. Items for the *Sex Drive* factor (Items 17–21) assess the belief that men's sex drive is stronger than women's sex drive. Items for the *Performance and Orgasm* factor (Items 22–25) measure the belief in the importance of orgasm and male sexual performance. Items for the *Player* factor (Items 26–29) assess the belief that the term "player" is positive or complimentary for men. And finally, items for the *Emotional Sex* factor (Items 30–32) reflect the belief that sex is more emotionally involving for women, relative to men.

Development

We utilized a ground-up approach to developing the SSS. We began by soliciting the views of heterosexual

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university students on "the rules of dating, relationships, and sexuality" in focus groups (three focus groups of men and four focus groups of women). We then used thematic analysis (Braun & Clarke, 2006) to identify cohesive themes of contemporary sexual scripts, and used verbatim and near-verbatim quotes from our focus group participants to create 160 candidate items for the SSS (a technique for increasing the validity of a developing measure; Dawis, 1987). We then administered our initial pool of items online to a second sample, a large convenience sample of heterosexual adults (N = 721) via social media and used exploratory factor analysis (EFA) to identify the six subscales of the SSS and reduce the number of items down to the final 32. Confirmatory factor analysis was conducted on a third heterosexual sample (N = 207).

Response Mode and Timing

Participants respond to items using a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). We chose an even-numbered rating scale to prevent participants from defaulting to socially desirable responses (removing the option for a neutral middle response option). Most participants should be able to complete the SSS in approximately five to ten minutes.

Scoring

Scoring the SSS involves calculating average scores for each of the individual six factors; three items need to be reverse-scored (Items 28, 29, and 32). As our analyses suggest that both single-factor and higher-order solutions fit worse than a correlated six-factor solution (Sakaluk et al., 2014), we strongly advise against researchers calculating a total score for the SSS.

Reliability

Results from our EFA sample (Study 2; Sakaluk et al., 2014) suggest that all six SSS factors are internally consistent (α's ranged from .73 to .90). We did not, however, originally calculate alpha coefficients for the SSS factors in our CFA sample (Study 3, Sakaluk et al., 2014) Retroactively estimating their construct reliabilities (Hatcher, 1994) using the loading and residual values reported in Table 4 of our article (see p. 528) suggests that SSS factors are all generally internally consistent (α = .68 to .93) in this sample as well. Finally, test–retest reliability analyses in our CFA sample suggest that all six factors exhibit significant stability over time (rs = .38 to .81).

Validity

Confirmatory factor analysis in our third sample supports the validity of the six-factor model of the SSS, and this measurement model was invariant between men and women, making the SSS appropriate for gender comparisons (Vandenberg & Lance, 2000).

Correlational analyses from our second sample also support the construct validity of the SSS (Sakaluk et al., 2014). Endorsement of the sexual double standard was a key measure of criterion validity of our measure, as the sexual double standard is theorized as being rooted in supporting traditional sexual scripts (Wiederman, 2005). All six factors of the SSS were significantly and positively associated with Sexual Double Standard Scale (Muehlenhard & Quackenbush, 2011) scores, supporting the criterion validity of the SSS. Many of the SSS factors were also significantly and positively correlated with measures other beliefs about masculinity and femininity, supporting the convergent validity of the SSS (Eisler & Skidmore, 1987; Gillespie & Eisler, 1992). Finally, the SSS factors were generally uncorrelated with aspects of socially desirable responding (Paulhus, 1991), supporting the discriminant validity of the SSS.

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Exhibit

Sexual Scripts Scale

Please indicate the extent to which you agree with the following statements:

	1 Strongly Disagree	2	3	4	5	6 Strongly Agree
1. I think negatively of a man who has had a lot of sexual partners.	○	○	○	○	○	○
2. I have a hard time respecting a girl who has casual sex.	○	○	○	○	○	○
3. I have a hard time respecting a guy who has casual sex.	○	○	○	○	○	○
4. I think negatively of a woman who has had a lot of sexual partners.	○	○	○	○	○	○
5. I think men who have had a lot of sexual partners are shallow.	○	○	○	○	○	○
6. A man who has a lot of casual sex partners doesn't respect women.	○	○	○	○	○	○
7. I think women who have had a lot of sexual partners have low self-esteem.	○	○	○	○	○	○
8. I would respect a woman more if she didn't have sex early in a relationship.	○	○	○	○	○	○
9. Men who have had a lot of sexual partners are manipulators.	○	○	○	○	○	○
10. It's easy for a girl to turn a guy on.	○	○	○	○	○	○
11. Men are easily turned on.	○	○	○	○	○	○
12. It's easy for men to have orgasms.	○	○	○	○	○	○
13. Men are more easily aroused than women.	○	○	○	○	○	○
14. Men are simple when it comes to sex.	○	○	○	○	○	○
15. Women's sexuality is more complicated than men's.	○	○	○	○	○	○
16. It's easy for a woman to be good at sex because men are easy to arouse.	○	○	○	○	○	○
17. Men have stronger urges for sex than women.	○	○	○	○	○	○
18. Men need sex more than women.	○	○	○	○	○	○
19. Men have a higher sex drive than women.	○	○	○	○	○	○
20. Men have a stronger biological need for sex.	○	○	○	○	○	○
21. Women aren't as sexually driven as men.	○	○	○	○	○	○
22. For it to be good sex, both partners need to orgasm.	○	○	○	○	○	○
23. If a man wants a woman to sleep with him again, he has to give her an orgasm.	○	○	○	○	○	○
24. A man's ability to give a woman an orgasm is an indicator of his sexual skill.	○	○	○	○	○	○
25. Having an orgasm is really important to women.	○	○	○	○	○	○
26. Men like being called a player.	○	○	○	○	○	○
27. Men think being a "player" is a positive thing.	○	○	○	○	○	○
28. It's an insult to be called a "player."	○	○	○	○	○	○
29. Men dislike being called a "player."	○	○	○	○	○	○
30. Women are more likely than men to get emotionally attached during sex.	○	○	○	○	○	○
31. Sex is more emotional for women than men.	○	○	○	○	○	○
32. Men are as likely as women to get attached after sex.	○	○	○	○	○	○

Heterosexual Script Scale

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The Heterosexual Script Scale (HSS; Seabrook et al., 2016) is composed of 22 items that measure endorsement of the heterosexual script. The heterosexual script refers to the set of complementary but unequal roles that women and men are expected to follow in their romantic and sexual interactions. The heterosexual script is composed of the sexual double standard (e.g., men want sex and women set sexual limits), courtship strategies (e.g., men attract women with power and women attract men through beauty and sexiness), and commitment strategies (e.g., men avoid commitment and women prioritize relationships). Distinct from other measures of gender roles, the HSS captures the interactional nature of women's and men's roles in heterosexual courtship.

Development

The initial 27 items were developed based on previous measures related to the heterosexual script (e.g., Attitudes Toward Dating and Relationships Measure; Ward & Rivadeneyra, 1999) as well as themes identified in a content analysis of the heterosexual script on primetime television (Kim et al., 2007). A team of 13 media and/or sexuality researchers discussed and agreed on the items.

An Exploratory Factor Analysis (EFA) of the 27 items was conducted using responses from 555 undergraduate women and men (mean age = 19.31, 54.8% female, 69.2% white, 93.9% heterosexual). We removed 2 items that failed to correlate with other items on the scale. An EFA of the remaining 25 items revealed four factors. We removed 2 items that cross-loaded onto more than one factor at .30 or higher and 1 item that loaded onto a factor by itself. Our final solution revealed a four-factor scale with 22 items ($\alpha = .88$).

We conducted a CFA with a separate sample of 625 undergraduate women and men (mean age = 19.16, 62.7% female, 68.5% white, 96.0% heterosexual). Our scale had adequate fit ($X^2(203) = 670.938$, $p < .01$; RMSEA = .065; 90% CI for RMSEA [.060, .071]; NNFI = .941; CFI = .948; SRMR = .056). We then tested a second order CFA which also demonstrated acceptable fit ($X^2(205) = 695.869$, $p < .01$; RMSEA =.067; 90% CI for RMSEA [.062, .073]; NNFI = .938; CFI = .945; SRMR = .058). The adequate fit of the second order CFA suggests that the four factors of the HSS scale all represent an underlying factor called the heterosexual script.

Response Mode and Timing

The measure can be completed using paper-and-pencil surveys or a computer in approximately 2–4 minutes. Participants are asked to rate their agreement with each statement on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

Scoring

A mean score across all 22 items is calculated to reflect degree of endorsement of the heterosexual script.

Reliability

Internal consistency for the HSS is consistently between .84 and .89. The HSS has been tested among undergraduate students at a predominantly white university. Researchers wishing to use the HSS among non-white, non-undergraduate, or non-heterosexual samples should be careful to establish reliability before use.

Validity

We tested for metric invariance for women and men (Kline, 2011; Reise, Widaman, & Pugh, 1993). Although our scale demonstrated convergent validity (i.e., the factor structure was the same for women and men; $X^2(410) = 901.861$, $p < .01$; RMSEA = .0663; 90% CI for RMSEA [.0606, .0720]; NNFI = .928; CFI = .936; SRMR = .0692) we were not able to establish complete metric invariance (Items 7, 8, 13, & 18 did not load on their respective factors equally for women and men; see Seabrook et al. (2016) for a detailed summary of measurement invariance testing). Therefore, we recommend reporting reliabilities separately for women and men.

Correlations between the HSS scales measuring similar constructs (e.g., Attitudes Toward Women Scale for Adolescents: Galambos, Petersen, Richards, & Gitelson, 1985; Adolescent Masculinity Ideology in Relationships Scale: Chu, Porche, & Tolman, 2005; Adversarial Sexual Beliefs Scale: Burt, 1980; Romantic Beliefs Inventory: Sprecher & Metts, 1989; Ambivalent Sexism: Glick & Fiske, 1996; Enjoyment of Sexualization Scale: Liss, Erchull, & Ramsey, 2010; Objectified Body Consciousness—Surveillance subscale; Lindberg, Hyde, & McKinley, 2006; sexual appeal self-worth; Gordon &

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Ward, 2000), were all significant at $p < .001$ and range from .23 to .62.

The HSS is distinct from other measures of gender roles (e.g., Attitudes Toward Women Scale for Adolescents, Adolescent Masculinity Ideology in Relationships Scale, and Adversarial Sexual Beliefs Scale) in that it is significantly and positively correlated with measures of idealized romantic beliefs, self-sexualization, and self-objectification, whereas other gender role measures either do not significantly correlate or are correlated less strongly than the HSS (see Seabrook et al., 2016, for a more in depth discussion).

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Exhibit

Heterosexual Script Scale

There are lots of beliefs about how dating and relationships work for men and women. We want to know what you think. Please rate how much *you* agree with the following statements using the following scale:

	1 Strongly disagree	2 Disagree	3 Disagree a little	4 Agree a little	5 Agree	6 Strongly agree
1. Women with a lot of "experience" should expect a bad reputation.	○	○	○	○	○	○
2. Most guys don't want to be "just friends" with a girl.	○	○	○	○	○	○
3. No matter what she says, a girl isn't really happy unless she's in a relationship.	○	○	○	○	○	○
4. A woman should be willing to make personal sacrifices in order to satisfy her partner.	○	○	○	○	○	○
5. Guys like to play the field and shouldn't be expected to stay with one partner for too long.	○	○	○	○	○	○
6. The best way for a girl to attract a boyfriend is to use her body and looks.	○	○	○	○	○	○
7. In the dating game, guys frequently compete with each other for partners, and girls try to lure or catch partners.	○	○	○	○	○	○

8.	Guys who are able to date a lot of people (players) are considered cool.	○	○	○	○	○	○
9.	Being with an attractive partner gives a guy prestige.	○	○	○	○	○	○
10.	It's only natural for a guy to make advances on someone he finds attractive.	○	○	○	○	○	○
11.	Guys are always ready for sex.	○	○	○	○	○	○
12.	It is natural for a guy to want to admire or check out other people, even if he is dating someone.	○	○	○	○	○	○
13.	Girls should do whatever they need to (e.g., use make-up, buy attractive clothes, work out) to look good enough to attract a date/partner.	○	○	○	○	○	○
14.	Guys are more interested in physical relationships and girls are more interested in emotional relationships.	○	○	○	○	○	○
15.	Men should be the ones to ask women out and initiate physical contact.	○	○	○	○	○	○
16.	A woman wants a man because she wants someone to protect her.	○	○	○	○	○	○
17.	Women like to admire men's bodies and are attracted most to men who are muscular and handsome.	○	○	○	○	○	○
18.	There is nothing wrong with men being primarily interested in a woman's body.	○	○	○	○	○	○
19.	Women are attracted most to a man with a lot of money.	○	○	○	○	○	○
20.	Sometimes girls have to do things they don't want to do to keep their boyfriend happy.	○	○	○	○	○	○
21.	A man should always protect and defend his woman.	○	○	○	○	○	○
22.	It is up to women to keep things from moving too fast sexually.	○	○	○	○	○	○

Stereotypes About Male Sexuality Scale

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Cognitive approaches to human sexuality have recently received considerable attention; however, there remains a paucity of instruments designed to deal with the types of cognitive beliefs that might influence sexual feelings and behaviors. Snell and colleagues attempted to address this concern through the development and validation of the Stereotypes About Male Sexuality Scale (SAMSS; Snell, Belk, & Hawkins, 1986, 1990; Snell, Hawkins, & Belk, 1988). The SAMSS is an objective self-report questionnaire that is designed to measure 10 distinctive stereotypic beliefs about males and their sexuality (cf. Zilbergeld, 1978, ch. 4): (a) Inexpressiveness, (b) Sex Equals Performance, (c) Males Orchestrate Sex, (d) Always Ready for Sex, (e) Touching Leads to Sex, (f) Sex Equals Intercourse, (g) Sex Requires Erection, (h) Sex Requires Orgasm, (i) Spontaneous Sex, and (j) Sexually Aware Men. The 10 subscales on the SAMSS can be used in research as individual-tendency measures of stereotypes about males and their sexuality.

Development

Items were initially developed with the hopes of measuring each of the 10 stereotypes. Based on item-total correlations, six measures were used for each stereotype—leading

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to a total of 60 items. The scale was initially validated on a sample of university students in Texas.

Response Mode and Timing

The SAMSS consists of 60 items. Individuals respond to the 60 items on the SAMSS using a 5-point Likert-type scale: A (*agree*); B (*slightly agree*); C (*neither agree nor disagree*); D (*slightly disagree*); and E (*disagree*). The measure can be administered online, or on paper. The questionnaire usually takes about 20–25 minutes to complete.

Scoring

The items are recoded so that A = +2, B = +1, C = 0, D = –1, and E = –2, so that the anchors range from *agree* (+2) to *disagree* (–2). The items assigned to each subscale are (a) *Inexpressiveness* (1, 11, 21, 31, 41, 51); (b) *Sex Equals Performance* (2, 12, 22, 32, 42, 52); (c) *Males Orchestrate Sex* (3, 13, 23, 33, 43, 53); (d) *Always Ready for Sex* (4, 14, 24, 34, 44, 54); (e) *Touching Leads to Sex* (5, 15, 25, 35, 45, 55); (f) *Sex Equals Intercourse* (6, 16, 26, 36, 46, 56); (g) *Sex Requires Erection* (7, 17, 27, 37, 47, 57); (h) *Sex Requires Orgasm* (8, 18, 28, 38, 48, 58); (i) *Spontaneous Sex* (9, 19, 29, 39, 49, 59); and (j) *Sexually Aware Men* (10, 20, 30, 40, 50, 60). Higher sub-scale scores thus correspond to greater agreement with the 10 cognitive beliefs measured by the SAMSS.

Reliability

The alpha values for these 10 subscales range from a low of .63 to a high of .93 with an average of .80 (Snell et al., 1986).

Validity

Snell et al. (1990) reported the results of two investigations involving the SAMSS. In the first study, the relationship between the SAMSS and two gender-role measures were examined. The results were that the restrictive emotionality aspect of the masculine role was strongly associated with stereotypic beliefs about male sexuality (Doyle, 1989; Gould, 1982; Gross, 1978; Herek, 1987; Mosher & Anderson, 1986; Mosher & Sirkin, 1984). Other gender-role preferences and behaviors were also found to be positively associated with conventional "performance" approaches to male sexuality. In the second investigation, counseling trainees were asked to describe how mentally healthy adult men and women would respond to the SAMSS. The responses of both male and female in-training counselors indicated that they expected mentally healthy males (a) to reject inhibited, control, and constant readiness approaches to the expression of male sexuality and (b) to express greater disagreement toward defining male sexuality only in terms of sexual intercourse and toward viewing males as inherently knowledgeable about sex. These results thus provide evidence for the importance of the SAMSS and a cognitive approach to the study of male sexuality. The Masculinity, Attitudes, Stress, and Conformity Scale (MASC; Nabavi, 2004) and SAMSS were used together in a study assessing gay male couple relationships, and masculinity expectations (Wheldon & Pathak, 2010). The MASC and SAMSS were positively correlated (r = .54), suggesting acceptable convergent validity, as well as confirmation that the scale may also be acceptable for use in gay male samples. Finally, the SAMSS has been found to correlate significantly and negatively with the use of bilateral social influence strategies (Snell et al., 1988), thus providing evidence for the validity of the SAMSS in that conventional beliefs about sex, as measured by the SAMSS, were expected to be associated with the use of selfish (vs. bilateral) influence strategy use with an intimate partner.

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Exhibit

Stereotypes about Male Sexuality Scale

We would like to know something about people's beliefs about male sexuality. For this reason, we are asking you to respond to a number of items that deal with male sexuality, indicating the extent to which you disagree/agree with the statements. For each of the items on this page, you will be indicating your answer on the computer-scoreable answer sheet by darkening in the number (or letter) that corresponds to your response. Your response should be based on the sorts of things that you believe about male sexuality. Use the following scale to indicate your degree of agreement/disagreement with each item. There are no right or wrong answers. Your choices should be a description of your own personal beliefs.

	A Agree	B Slightly Agree	C Neither Agree nor Disagree	D Slightly Disagree	E Disagree
1. Men should not be held.	○	○	○	○	○
2. Most men believe that sex is a performance.	○	○	○	○	○
3. Men generally want to be the guiding participant in sexual behavior.	○	○	○	○	○
4. Most men are ready for sex at any time.	○	○	○	○	○
5. Most men desire physical contact only as a prelude to sex.	○	○	○	○	○
6. The ultimate sexual goal in men's mind is intercourse.	○	○	○	○	○
7. Lack of an erection will always spoil sex for a man.	○	○	○	○	○
8. From a man's perspective, good sex usually has an "earthshaking" aspect to it.	○	○	○	○	○
9. Men don't really like to plan their sexual experiences.	○	○	○	○	○
10. Most men are sexually well-adjusted.	○	○	○	○	○
11. Only a narrow range of emotions should be permitted to men.	○	○	○	○	○
12. Men are almost always concerned with their sexual performance.	○	○	○	○	○
13. Most men don't want to assume a passive role in sex.	○	○	○	○	○
14. Men usually want sex, regardless of where they are.	○	○	○	○	○
15. Among men, touching is simply the first step towards sex.	○	○	○	○	○
16. Men are not sexually satisfied with any behavior other than intercourse.	○	○	○	○	○
17. Without an erection a man is sexually lost.	○	○	○	○	○
18. Quiet, lazy sex is usually not all that satisfying for a man.	○	○	○	○	○
19. Men usually like good sex to "just happen."	○	○	○	○	○
20. Most men have healthy attitudes toward sex.	○	○	○	○	○
21. A man who is vulnerable is a sissy.	○	○	○	○	○
22. In sex, it's a man's performance that counts.	○	○	○	○	○
23. Sexual activity is easier if the man assumes a leadership role.	○	○	○	○	○
24. Men are always ready for sex.	○	○	○	○	○
25. A man never really wants "only" a hug or caress.	○	○	○	○	○
26. Men want their sexual experiences to end with intercourse.	○	○	○	○	○
27. A sexual situation cannot be gratifying for a man unless he "can get it up."	○	○	○	○	○
28. Sexual climax is a necessary part of men's sexual behavior.	○	○	○	○	○
29. Most men yearn for spontaneous sex that requires little conscious effort.	○	○	○	○	○
30. In these days of increased openness about sex, most men have become free of past inhibiting ideas about their sexual behavior.	○	○	○	○	○
31. A man should be careful to hide his feelings.	○	○	○	○	○
32. Men's sexuality is often goal-orientated in its nature.	○	○	○	○	○
33. Sex is a man's responsibility.	○	○	○	○	○
34. Most men come to a sexual situation in a state of constant desire.	○	○	○	○	○
35. Men use physical contact as a request for sex.	○	○	○	○	○

36.	Men believe that every sexual act should include intercourse.	○	○	○	○	○
37.	Any kind of sexual activity for a man requires an erection.	○	○	○	○	○
38.	Satisfying sexual activity for a man always includes increasing excitement and passion.	○	○	○	○	○
39.	A satisfying sexual experience for a man does not really require all that much forethought.	○	○	○	○	○
40.	Most men have progressive ideas about sex.	○	○	○	○	○
41.	It is unacceptable for men to reveal their deepest concerns.	○	○	○	○	○
42.	Men usually think of sex as work.	○	○	○	○	○
43.	A man is supposed to initiate sexual contact.	○	○	○	○	○
44.	Men are perpetually ready for sex.	○	○	○	○	○
45.	Many men are dissatisfied with any bodily contact which is not followed by sexual activity.	○	○	○	○	○
46.	Many men are only interested in sexual intercourse as a form of sexual stimulation.	○	○	○	○	○
47.	An erection is considered by almost all men as vital for sex.	○	○	○	○	○
48.	Men's sexual desire is often "imperative and driven" in nature.	○	○	○	○	○
49.	Men consider sex artificial if it is preplanned.	○	○	○	○	○
50.	In these days of wider availability of accurate information, most men are realistic about their sexual activities.	○	○	○	○	○
51.	Intense emotional expressiveness should not be discussed by men.	○	○	○	○	○
52.	Sex is a pressure-filled activity for most men.	○	○	○	○	○
53.	Men are responsible for choosing sexual positions.	○	○	○	○	○
54.	Men usually never get enough sex.	○	○	○	○	○
55.	For men, kissing and touching are merely the preliminaries to sexual activity.	○	○	○	○	○
56.	During sex, men are always thinking about getting to intercourse.	○	○	○	○	○
57.	Without an erection, sexual activity for a man will end in misery.	○	○	○	○	○
58.	Sexual activity must end with an orgasm for a man to feel satisfied.	○	○	○	○	○
59.	For men, natural sex means "just doing it instinctively."	○	○	○	○	○
60.	Most men have realistic insight into their sexual preferences and desires.	○	○	○	○	○

Scale of Sexual Permissiveness for Relationship Stages

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The Sexual Permissiveness Scale (SPS) was developed to assess people's attitudes about the acceptance of premarital sex at different levels of relational development (Sprecher, McKinney, Walsh, & Anderson, 1988). It was modeled after Reiss's (1964, 1967) Premarital Sexual Permissiveness Scale, but with sexual behaviors and relationship stages that were designed to more adequately measure variation in sexual permissiveness. It was referred to as the Premarital Sexual Permissiveness Scale, but because many people do not marry, we have decided to omit the "Premarital," renaming it the scale of *Sexual Permissiveness for Relationship Stages* (SPRS).

Multiple-item scales, such as the SPRS, are more discriminating measures of sexual standards than single items often found in national studies, such as the item used in the General Social Survey (http://gss.norc.org): "If a man

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and a woman have sex relations before marriage, do you think it is always wrong, almost always wrong, wrong only sometimes, not wrong at all or don't know." People may be accepting of sex under some relational conditions (e.g., a serious, committed relationship) but not others (e.g., casual dating), and the SPRS can assess such variation.

Multiple versions of the scale can be administered, either with the same participants (within-subject design) or with different participants (between-subject design), with each version focusing on a different target in the scale items. This allows the investigator to not only examine a sample's general sexual permissiveness but also to examine how sexual permissiveness may vary for different targets. The most common comparisons that have been made are standards for men versus women (an assessment of the double standard), and standards for self versus others (e.g., Sprecher, Treger, & Sakaluk, 2013).

Development

The original version of the scale (Sprecher et al., 1988) contained 15 items assessing acceptance of three sexual behaviors (heavy petting, i.e., touching of genitals; sexual intercourse; and oral–genital sex) for each of five relationship stages (first date; casually dating; seriously dating; pre-engaged; and engaged). Not surprisingly, people were found to be least accepting of sex at the first date stage, and most accepting of sex at the engaged stage. With each increasing relationship stage, more acceptance was expressed, with the greatest increments between first date and casual dating, and then between casual dating and seriously dating (Sprecher et al., 1988; Sprecher, 1989). Variation in approval was also found among the sexual activities. Consistently, people were most accepting of heavy petting. Sexual intercourse was viewed as slightly more acceptable than was oral–genital sex in Sprecher et al.'s (1988) analysis, but the reverse was found in Sprecher (1989). The changing of approval of oral–genital sex, compared to sexual intercourse, at different relationship stages and for different targets, would be a topic for future research. More recently, when the scale is embedded in a questionnaire with many other measures, only the sexual intercourse items are included (Sprecher et al., 2013).

Response Mode and Timing

In most of our research using the scale, the items are followed by a six-point response scale: 1 (*agree strongly*), 2 (*agree moderately*), 3 (*agree slightly*), 4 (*disagree slightly*), 5 (*disagree moderately*), and 6 (*disagree strongly*). Interpretation of results is facilitated by reverse coding the responses so that the higher number indicates greater acceptance. The scale, even if it is administered multiple times, does not take long to complete. The version that includes five items takes one to two minutes to complete.

Scoring

To create a total score representing degree of sexual permissiveness, a mean of the items is recommended (although a sum is also acceptable). If multiple versions are included (i.e., a version for self, a version for a male target, a version for a female target), it is recommended that a total score be computed separately for each version. Also, as noted above, for ease of interpretation it is recommended that the response options first be reverse scored so that the higher number indicates greater agreement. It is further possible to split this scale into separate indices. Sprecher et al.'s (2013) principal components analysis of the scale yielded two components: sexual permissiveness in casual relationships (aggregate of the first two items of the scale) and sexual permissiveness in committed relationships (aggregate of the remaining three items of the scale).

Reliability

The scale has high internal consistency. Based on data collected from almost 8,000 students at a Midwestern university in the United States (by the first author), Cronbach's alpha for the five-item scale measuring acceptability of sexual intercourse for the self was .82. If split into two components (Sprecher et al., 2013), the Cronbach's alphas were .86 for the casual relationships component and .94 for the committed relationships component.

Validity

Construct validity is evidenced by findings of expected differences between male and female participants (e.g., Sprecher, 1989; Sprecher et al., 1988; Sprecher et al., 2013). That is, men are found to be more permissive than women on the SPRS, especially at the stages of first date and casually dating. In addition, scores on the scales (including after being split into two components, for casual relationships and for committed relationships) have been found to be positively correlated with the sexual attitude items from Simpson and Gangestad's (1991) Sociosexuality Orientation Inventory (Sprecher et al., 2013).

Other Information

If the researcher has the space for only a few items of the scale, our suggestion is that the three items asking about acceptability of sexual intercourse for first date, casual dating, and serious dating be selected. The greatest variation is found for the items asking about first date and casual dating.

Although the scale has been used primarily to examine young adults' attitudes about their own and peers' sexual activity in various stages of relationship development, it could also be used in other ways, including to assess parents' attitudes about their adult children's sexual behavior (e.g., "I believe that sexual intercourse is acceptable for my son when he is casually dating").

Researchers interested in assessing premarital sexual attitudes may continue to adapt and modify the scale, to explore other interesting nuances of sexual attitudes. For example, researchers have used the scale to assess how young adults' sexual attitudes are affected by the content

of television viewing (Taylor, 2005), music (Kistler & Lee, 2009), and magazines (Taylor, 2006).

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Exhibit

Scale of Sexual Permissiveness for Relationship Stages

For each of the following statements, indicate to what extent you agree or disagree with it. These statements concern what you think is appropriate behaviour for you.

	1 Agree Strongly	2 Agree Moderately	3 Agree Slightly	4 Disagree Slightly	5 Disagree Moderately	6 Disagree Strongly
1. I believe that sexual intercourse is acceptable for me on a first date.	○	○	○	○	○	○
2. I believe that sexual intercourse is acceptable for me when I'm casually dating my partner (dating less than one month).	○	○	○	○	○	○
3. I believe that sexual intercourse is acceptable for me when I'm seriously dating my partner (dating almost a year).	○	○	○	○	○	○
4. I believe that sexual intercourse is acceptable for me when I'm pre-engaged to my partner (we have seriously discussed the possibility of getting married).	○	○	○	○	○	○
5. I believe that sexual intercourse is acceptable for me when I'm engaged to my partner.	○	○	○	○	○	○

Sexual Scripts Overlap Scale—Short Version

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Little is known about the possible impact of pornography or sexually explicit material (SEM) use on young people's sexual socialization. The efforts to assess perceived influence of pornography on one's sex life have been characteristically brief and direct—thus vulnerable to normative expectations and socially desirable answers. According to our conceptualization, pornographic imagery competes with other socially available sexual narratives in the process of sexual scripting, particularly in the formation of personal sexual scripts (Simon & Gagnon, 2003; Wiederman, 2015). It should be possible, therefore, to retrospectively assess the impact of SEM on

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sexual socialization by measuring the overlap between a pornographic and personal depiction of sex, which is what the Sexual Scripts Overlap Scale (SSOS) does (k = 42). The SSOS has been found to be a useful tool in modeling mediated effects of early or current SEM use on sexual satisfaction (Štulhofer, Buško, & Landripet, 2010), body appearance satisfaction (Harkness, 2015), and subjective sexual wellbeing (Kuan, 2016) in young adults. To facilitate wider application of this composite measure, a brief but more robust version of the scale (SSOS-S; k = 20) was developed and validated using two online surveys.

Development

The original SSOS was developed by asking a group of Croatian college students (N = 41) to make a list of things/activities/sensations that are important for the pornographic depiction of sex. Another group (N = 35) was asked to do the same for what they personally considered to be "great sex." The two inventories—the *Pornographic Inventory* and the *Great Sex Inventory*—were then merged. Judged for relevance and occurrence, 42 items were selected and combined into the final inventory. In 2006 and 2007, two online surveys were carried out to validate this new instrument among sexually active young adults (18–25) with at least some experience with SEM. In 2006, the questionnaire was completed by 1,914 participants and in 2007 by another 600. In the first part of the questionnaire, participants were asked to assess the importance of the listed 42 items for great sex. Near the end of the questionnaire, participants were asked to assess the inventory again, but this time they were asked about each item's importance for the pornographic presentation of sex. In both cases, answers were anchored on a 5-point Likert-type scale. The scores were computed on each of the 42 paired items by subtracting the Pornographic item value from the *Great Sex* item value. After the SSOS scores were reverse recoded, greater overlap between the values—which implied greater influence of pornography on sexual socialization—was represented by higher SSOS scores (for the list of the SSOS items, see Štulhofer, Buško, & Landripet, 2010). The SSOS items reflected five important dimensions of sexual socialization: (a) personal and partner sexual role expectations, (b) content of "successful" sex, (c) sexiness and body image, (d) relationship between emotions, intimacy, and sexuality, and (e) power dynamics within sexual relationship.

To make the SSOS more efficient, items from both inventories were arranged according to their sample means to determine the most characteristic aspects of the *Great Sex* and *Pornographic* script. The top 10 items from both inventories were identical in 2006 and 2007. The resulting 20-item version of the scale (SSOS-S) was normally distributed (2006: range 8–80, M = 45.0, SD = 11.3; 2007: range 17–79, M = 44.2, SD = 11.1) and highly correlated with the SSOS, both in total and by gender (rs = .90–.94, all ps < .001). Principal component analysis indicated the presence of four dimensions (eigenvalues > 1) in the 2006 dataset, accounting for 57 percent of the total item variance. However, scree test suggested a forced two-factor solution: 10 items loaded high (> .4) on the Sexual Intimacy factor and the remaining 10 on the Sexual Performance factor. Similar structure and factor loadings were found in the 2007 sample.

Response Mode and Timing

To minimize self-censorship, the Great Sex Inventory should be placed closer to the beginning of the questionnaire and the Pornographic Inventory closer to its end. In the Pornographic Inventory, for female participants, items 1 and 2 should be switched in order, as should items 11 and 12. Respondents are asked to assess the importance of the 20 items for what they consider to be great sex ("How important for great sex do you personally find the following . . . ?") and for pornographic representation of sex ("How important for pornographic depiction of sex do you find the following . . . ?"). Responses are recorded on a 5-point scale ranging from 1 (*not at all important*) to 5 (*exceptionally important*).

Scoring

Twenty overlap items are calculated from the paired *Great Sex* and *Pornographic* inventory items by subtracting the second from the first (negative signs are ignored). The SSOS-S is additive and represents a linear combination of the overlap-item scores. Absolute range of the scale is 0 (all paired items have identical values) to 80 (all paired items have opposite values). The SSOS-S score for each participant is reversed (80 – original additive score), so that higher scores indicate greater overlap between the scripts.

Reliability

The SSOS-S had satisfactory internal consistency in both samples (α_{2006} = .84 and α_{2007} = .83), with reliability coefficients lower for women (2006: α_{Female} = .80; 2007: α_{Female} = .79). In 2007, an English version of the SSOS-S was tested in a sample of 356 U.S. college students (α = .88).

Validity

Construct validity was assessed by zero-order correlations between the SSOS-S and theoretically relevant measures of partner intimacy, exposure to SEM at the age of 14 and 17, range of sexual experiences, the acceptance of myths about sexuality, attitudes towards SEM, and compulsive sexual thoughts and behaviors. All the associations were significant and in the expected direction in both samples (rs = .21–.50, all ps < .001). Convergent validity was investigated by relating the scale scores to the real-life desirability of SEM-portrayed sexuality, personal importance of SEM, and the perceived realism of pornographic depictions of sex. Again, significant and moderately strong associations were found (rs = .35–.40, all ps < .001). Finally, criterion

validity was demonstrated by the scale's ability to differentiate between male and female participants, as well as between users of mainstream vs. nonmainstream SEM. Women reported lesser overlap than men ($p < .001$), whereas users of nonmainstream SEM (BDSM, fetishism, bestiality, and/or sexually violent/coercive material) reported higher overlap than those who preferred mainstream content ($p < .05$). Effect size of the observed differences ranged from small to medium.

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Exhibit

Sexual Scripts Overlap Scale—Short Version

The "Great Sex" Script Items

How important for great sex do you personally find the following:

	1 Not at all	2 Somewhat	3 Moderately	4 A Great Deal	5 Exceptionally
1. I am always ready for sex.	○	○	○	○	○
2. My partner is always ready to have sex.	○	○	○	○	○
3. It is easy to initiate sex.	○	○	○	○	○
4. Sex is possible in any situation.	○	○	○	○	○
5. Oral sex.	○	○	○	○	○
6. Anal sex.	○	○	○	○	○
7. Partner's sexual pleasure.	○	○	○	○	○
8. Emotions, love.	○	○	○	○	○
9. Intimate communication.	○	○	○	○	○
10. Penetration.	○	○	○	○	○
11. Being constantly horny.	○	○	○	○	○
12. Partner is constantly horny.	○	○	○	○	○
13. Trust in partner.	○	○	○	○	○
14. Commitment.	○	○	○	○	○
15. Intense passion.	○	○	○	○	○
16. Feeling safe and well cared for.	○	○	○	○	○
17. Spontaneity.	○	○	○	○	○
18. Imagination.	○	○	○	○	○
19. Unselfishness.	○	○	○	○	○
20. "Pumping" (fast and deep penetration).	○	○	○	○	○

The Pornographic Script Items

How important for pornographic depiction of sex do you find the following:

	1 Not at all	2 Somewhat	3 Moderately	4 A Great Deal	5 Exceptionally
1. Men are always ready for sex.	○	○	○	○	○
2. Women are always ready to have sex.	○	○	○	○	○

3. It is easy to initiate sex.	○	○	○	○	○
4. Sex is possible in any situation.	○	○	○	○	○
5. Oral sex.	○	○	○	○	○
6. Anal sex.	○	○	○	○	○
7. Partner's sexual pleasure.	○	○	○	○	○
8. Emotions, love.	○	○	○	○	○
9. Intimate communication.	○	○	○	○	○
10. Penetration.	○	○	○	○	○
11. Men are constantly horny.	○	○	○	○	○
12. Women are constantly horny.	○	○	○	○	○
13. Trust in partner.	○	○	○	○	○
14. Commitment.	○	○	○	○	○
15. Intense passion.	○	○	○	○	○
16. Feeling safe and well cared for.	○	○	○	○	○
17. Spontaneity.	○	○	○	○	○
18. Imagination.	○	○	○	○	○
19. Unselfishness.	○	○	○	○	○
20. "Pumping" (fast and deep penetration).	○	○	○	○	○

28 Sexually Explicit Material and Online Sexual Activity

Problematic Pornography Consumption Scale

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The 18-item Problematic Pornography Consumption Scale (PPCS; Bőthe, Tóth-Király, Zsila, Griffiths, Demetrovics, & Orosz, 2018) assesses problematic pornography use (pornography use addiction) via six dimensions of addiction: salience, tolerance, mood modification, withdrawal, relapse, and conflict. These six dimensions describe the main components of behavioral addictions on the basis of Griffiths's (2005) addiction components model.

Development

As a theoretical framework, the well-established addiction components model (Griffiths, 2005) was applied to assess problematic pornography use. First, previous scales that had applied the addiction components model to assess other types of behavioral addiction were reviewed (e.g., Andreassen, Griffiths, Hetland, & Pallesen, 2012; Andreassen et al., 2015; Orosz, Bőthe, Tóth-Király, 2016; Orosz, Tóth-Király, Bőthe, & Melher, 2016; Terry, Szabo, & Griffiths, 2004) and the items of these scales were considered as a basis of the items for the PPCS. Following this, a focus group of four psychologists familiar with the theory and addiction research constructed four items for each component. The following guidelines were followed during item construction. Items should (a) be easy to understand; (b) be close to everyday language use; (c) not be double-barreled; (d) be concise; (e) clearly belong to one dimension but not to others; (f) not be suggestive; and (g) be adjusted to the scaling (Tóth-Király, Bőthe, Tóth-Fáber, Hága, & Orosz, 2017). After the focus group had created the items, two experts in the field of behavioral addictions revised them. In the final step, six individuals who were pornography users pretested and judged the level of understandability of each item. For the validation process, respondents were recruited to participate in the study via a popular public (but not pornography-related) social media site ($N = 772$; 51% females).

The construct validity of the PPCS was investigated with the examination of normality indices (i.e., skewness and kurtosis values), the corrected item–total correlations, the content validity of the items, the factor structure, and the measurement invariance of the scale. In order to construct a concise scale, three items per component were chosen. In the next step, confirmatory factor analysis was conducted and the hypothesized six-factor hierarchical model had excellent fit (CFI = .977, TLI = .973, RMSEA = .064 [90% CI .059–.070]). The PPCS provides the possibility to examine the role of each addiction component in problematic pornography use. Measurement invariance testing was conducted to ensure that gender-based comparisons were meaningful and not distorted by measurement biases (Tóth-Király, Bőthe, Rigó, & Orosz, 2017). The fit indices of the PPCS were adequate even after several equality constraints were added, indicating that gender-based comparisons were meaningful in the case of PPCS.

Latent profile analysis was employed to determine a cut-off score for the PPCS to identify potentially high-risk pornography users. A three-class solution was selected on the basis of several criteria. The first class comprised 79.5 percent of the respondents who were characterized as non-problematic users. The second class comprised 16.8 percent of the respondents who were characterized as

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low-risk users. The third class comprised 3.6 percent of the respondents who were characterized as at-risk pornography users. Using the third class as a gold standard, sensitivity and specificity analyses were conducted, as well as calculation of the positive predictive value, negative predictive value, and accuracy. A possible cut-off score of ≥ 76 was identified with a sensitivity of 93 percent, a specificity of 99 percent, a positive predictive value of 70 percent, a negative predictive value of 100 percent, and an accuracy of 98 percent.

Response Mode and Timing

The PPCS can be completed using paper-and-pencil or online in approximately 3–5 minutes. Respondents indicate how often each statement applies to them regarding their pornography use in the past six months from 1 (*Never*) to 7 (*All the time*).

Scoring

There are no reverse-coded items on the PPCS. The items from each dimension are simply added together (*Salience* items = 1, 7, and 13; *Mood modification* items = 2, 8, and 14; *Conflict* items = 3, 9, and 15; *Tolerance* items = 4, 10, and 16; *Relapse* items = 5, 11, and 17; *Withdrawal* items = 6, 12, and 18). For a total score, the items from all dimensions are added together. Higher scores indicate higher levels of problematic pornography use. A score of 76 or higher indicates the possibility of problematic pornography use.

Reliability

The internal consistencies of the PPCS subscales and the total score were assessed using Cronbach alpha values. For PPCS total score (α = .93), *Mood Modification* (α = .84), *Relapse* (α = .86), and *Withdrawal* (α = .86) factors, the internal consistencies were excellent. For *Salience* (α = .77), *Conflict* (α = .71), and *Tolerance* (α = .78) factors, the internal consistencies were adequate (Bőthe, Tóth-Király, Zsila et al., 2018). Adequate reliability was supported in subsequent studies (Bőthe, Tóth-Király, Demetrovics, & Orosz, 2017; Bőthe et al., 2019). These results demonstrate the reliability of the PPCS.

Validity

Convergent and divergent validity of the PPCS were established (Bőthe et al., 2017; Bőthe et al., 2019) in relation to hypersexuality (Bőthe, Bartók et al., 2018; Reid, Garos, & Carpenter, 2011), impulsivity (Billieux et al., 2012; Zsila, Bőthe, Demetrovics, Billieux, & Orosz, in press), compulsivity (First, Gibbon, Spitzer, Williams, & Benjamin, 1997; Szádóczky, Unoka, & Rózsa, 2004), relationship satisfaction (Bőthe et al., 2017), sexual satisfaction (Bőthe et al., 2017; Mark, Herbenick, Fortenberry, Sanders, & Reece, 2014), and beliefs about the changeability of sexual life (Bőthe et al., 2017). According to this rigorous examination, problematic pornography use had positive, moderate associations with hypersexuality (also known as compulsive sexual behavior or sex addiction), $r(13,776) = .57$, $p < .01$, and frequency of pornography use, $r(10,461) = .51$, $p < .01$). Problematic pornography use had weak, positive associations with impulsivity, $r(13,776) = .15$, $p < .01$, and compulsivity, $r(13,776) = .13$, $p < .01$, and weak, negative associations with relationship satisfaction, $r(10,461) = –.13$, $p < .01$, sexual satisfaction, $r(10,461) = –.18$, $p < .01$, and beliefs about the changeability of sexual life, $r(10,461) = –.18$, $p < .01$. These results provide support for the validity of the PPCS.

Regarding gender-based differences, males ($M = 2.26$, $SD = 1.07$) had significantly higher scores on problematic pornography use than females ($M = 1.66$, $SD = .87$), $t(729.77) = 8.52$, $p < .01$. Regarding sexual orientation-based differences on the PPCS using one-way ANOVA, no significant differences were found between individuals describing themselves as (a) heterosexual, (b) heterosexual with homosexuality to some extent, (c) bisexual, (d) homosexual with heterosexuality to some extent and (e) homosexual, $F(4, 762) = 1.76$, $p = .14$ (Bőthe, Tóth-Király, Zsila et al., 2018).

Based on all of the psychometric testing to date, the PPCS is a robust multidimensional scale assessing problematic pornography use with a strong theoretical background that also has strong psychometric properties in terms of validity and reliability.

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Exhibit

Problematic Pornography Consumption Scale

Please, think back to the past six months and indicate on the following 7-point scale how often or to what extent the statements apply to you. There is no right or wrong answer. Please indicate the answer that most applies to you.

	1 Never	2 Rarely	3 Occasionally	4 Sometimes	5 Often	6 Very Often	7 All the Time
1. I felt that porn is an important part of my life.	○	○	○	○	○	○	○
2. I used porn to restore the tranquility of my feelings.	○	○	○	○	○	○	○
3. I felt porn caused problems in my sexual life.	○	○	○	○	○	○	○
4. I felt that I had to watch more and more porn for satisfaction.	○	○	○	○	○	○	○
5. I unsuccessfully tried to reduce the amount of porn I watch.	○	○	○	○	○	○	○
6. I became stressed when something prevented me from watching porn.	○	○	○	○	○	○	○
7. I thought about how good it would be to watch porn.	○	○	○	○	○	○	○
8. Watching porn got rid of my negative feelings.	○	○	○	○	○	○	○
9. Watching porn prevented me from bringing out the best in me.	○	○	○	○	○	○	○
10. I felt that I needed more and more porn in order to satisfy my needs.	○	○	○	○	○	○	○
11. When I vowed not to watch porn anymore, I could only do it for a short period of time.	○	○	○	○	○	○	○
12. I became agitated when I was unable to watch porn.	○	○	○	○	○	○	○
13. I continually planned when to watch porn.	○	○	○	○	○	○	○
14. I released my tension by watching porn.	○	○	○	○	○	○	○
15. I neglected other leisure activities as a result of watching porn.	○	○	○	○	○	○	○
16. I gradually watched more "extreme" porn, because the porn I watched before was less satisfying.	○	○	○	○	○	○	○
17. I resisted watching porn for only a little while before I relapsed.	○	○	○	○	○	○	○
18. I missed porn greatly when I didn't watch it for a while.	○	○	○	○	○	○	○

Attitudes Toward Online Sexual Activity Scale

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Krystelle Shaughnessy,[2] *University of Ottawa*

Online sexual activity (OSA) refers to any type of behavior or experience using the Internet that involves sexual content or stimuli. The Attitudes Toward Online Sexual Activity scale is a 10-item measure used to assess the extent to which people hold positive or negative attitudes toward these types of online activities. We have used the measure to assess attitudes toward OSA overall (Shaughnessy, Byers, & Walsh, 2011) as well as toward subtypes of OSA (Byers & Shaughnessy, 2014).

Development

The items for the Attitudes Toward OSA measure were developed by Dr. Byers in the context of a survey study of university students' thoughts and experiences with a range of online and offline sexual behaviors (see Shaughnessy et al., 2011). The bipolar items represent opposing dimensional concepts on ten evaluative adjectives. The items were developed based on the Global Measures of Sexual Satisfaction and Relationship Satisfaction (see Lawrance, Byers, & Cohen, 2011). The original instructions asked participants to think about nine specific OSAs listed in the Online Sexual Experience Questionnaire (Shaughnessy et al., 2011). Specifically, the instructions were: What do you think about engaging in behaviors involving computer use such as those listed . . ." In a second set of studies, we modified the instructions to focus on each of three subtypes of OSA: *non-arousal* (e.g., seeking sexual information online), *solitary-arousal* (e.g., viewing sexually explicit pictures online), and *partnered-arousal* (e.g., exchanging sexually explicit messages online; Byers & Shaughnessy, 2014). The instructions presented with the items have been modified slightly to make it more flexible for future research use. The scale was translated into German and Swedish; however, evidence of the reliability and validity of the translated scales is not yet available.

Response Mode and Timing

The measure can be completed online or in paper format. Participants rate their thoughts and feelings about online sexual activities on a 7-point bipolar scale. The high end (7) and low end (1) of each item are labelled with opposing evaluative adjectives (e.g., *very good*/*very bad*). The measure takes approximately 2–5 minutes to complete.

Scoring

No items are reverse scored. The items are summed to create a total score ranging from 10 to 70. Higher scores indicate more positive attitudes.

Reliability

Cronbach's alpha as a measure of the internal consistency of the scale is reported in Table 1 for each of the studies

TABLE 1
Means, Standard Deviations, Cronbach's Alpha, and Sample Information for the Attitudes Toward OSA Scale

Sample	Sample characteristics	OSA context	*M* (*SD*)		α
217 Canadian heterosexual students[a]	108 men, 109 women; 18–28 years (*M* = 19.5, *SD* = 2.0).	Any	31.51 (9.60)		.93
221 Canadian university students[b]	81 male, 140 female students; (*M* = 19.8, *SD* = 2.2.); 90% white; 88% heterosexual.		**Men**	**Women**	
		Non-Arousal	48.9 (9.1)	47.9 (10.2)	.93
		Solitary-Arousal	46.9 (7.5)	40.0 (9.3)	.91
		Partner-Arousal	43.1 (8.7)	40.2 (9.5)	.92
325 Adults recruited online[b]	137 men, 188 women; 18–55 years (*M* = 28.4, *SD* = 8.6) 73% Canadian; 88% white/ caucasian; 62% heterosexual and the remainder identified as gay (9% of the overall sample), lesbian (7%), bisexual (17%), unlabelled (4%), and not sure (1%).		**Men**	**Women**	
		Non-Arousal	48.8 (9.7)	51.1 (11.0)	.92
		Solitary-Arousal	47.9 (11.0)	43.7 (14.1)	.95
		Partner-Arousal	45.2 (12.1)	44.2 (13.1)	.95

[a]Shaughnessy, Byers, & Walsh (2011); [b]Byers & Shaughnessy (2014)

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conducted to date using the scale. Across all studies, internal consistency is excellent (range = .91 to .95).

Validity

In student and adult community samples, we have found evidence that it is possible to separately measure attitudes for each type of OSA. People who reported more positive attitudes to one subtype of OSA reported significantly more positive attitudes to the other subtypes of OSA. However, the magnitude of the correlations (r = .51 to r = .62 in students; r = .61 to r = .74 in adults) suggested that the scales were not redundant. These results provide initial evidence of the validity of contextualizing the measure for specific subtypes of OSA.

As evidence of concurrent validity, in three separate samples we have found that participants' attitudes toward OSA are associated with the frequency of their OSA experiences. Specifically, people with more positive attitudes toward OSA in general report more frequent arousal-oriented OSA experience (i.e., OSAs focused on sexual arousal; r = .40; Shaughnessy et al., 2011). People with more positive attitudes toward subtypes of OSA also reported more frequent experience with the respective OSA subtype (e.g., attitudes toward solitary-arousal with solitary-arousal experience; Byers & Shaughnessy, 2014). Moreover, in a sample of heterosexual students, attitudes toward OSA uniquely predicted arousal-oriented OSA experience while controlling for sociosexual orientation (Shaughnessy et al., 2011).

We also have found evidence of the convergent validity of the Attitudes Toward OSA Scale. Specifically, the total score focused on OSAs overall correlated negatively with the Sexual Attitude Scale (Hudson, Murphy, & Nurius, 1983) and positively with the Sociosexual Orientation Inventory (Simpson & Gangestad, 1991) in a sample of heterosexual students. Students with more positive attitudes toward OSA also reported significantly more liberal sexual attitudes (r = –.39, p < .001) and greater acceptance of casual sex (r = .30, p < .001). Using the Sexual Opinion Scale (Rye, Meaney, & Fisher, 2011), we found consistent results in support of the convergent validity of the Attitudes Toward OSA Scale for each subtype of OSA separately. Specifically, we found that greater erotophilia predicted significantly more positive attitudes toward non-arousal, solitary-arousal, and partnered-arousal OSA separately in both a student (r = .42, .57, .48, respectfully, all ps < .001) and an adult sample recruited online (r = .39, .54, .54 respectively, all ps < .001).

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Exhibit

Attitudes toward Online Sexual Activity Scale

People have different thoughts and feelings about online sexual activities. Please select the number on the scale presented to represent your thoughts about participating in online sexual activities. There are no right or wrong answers, please indicate your personal beliefs.

1.	Very Morally Right	7	6	5	4	3	2	1	Very Morally Wrong
2.	Very Good	7	6	5	4	3	2	1	Very Bad
3.	Very Pleasant	7	6	5	4	3	2	1	Very Unpleasant
4.	Very Positive	7	6	5	4	3	2	1	Very Negative
5.	Very Valuable	7	6	5	4	3	2	1	Worthless
6.	Very Normal	7	6	5	4	3	2	1	Very Abnormal
7.	Very Healthy	7	6	5	4	3	2	1	Very Unhealthy
8.	Very Helpful	7	6	5	4	3	2	1	Very Harmful
9.	Very Fulfilled	7	6	5	4	3	2	1	Very Desperate
10.	Very Pure	7	6	5	4	3	2	1	Dirty

Items are presented as they appeared in paper format. For online surveys, we have used bipolar items with radial buttons that participants select without seeing the value of their selections.

Note to users: These instructions are for attitudes toward online sexual activities overall. The measure can also be used to assess attitudes toward specific sexual activities. In this case, the following instructions should be used:

Think about online sexual activities that involve *[description of activities focused on given here (e.g., accessing sexual information online, viewing sexual explicit material, engaging in cybersex)]*. People have different thoughts and feelings about these kinds of online sexual activities. Please select the number on the scale presented to represent your thoughts about participating in these kinds of online sexual activities. There are no right or wrong answers, please indicate your personal beliefs. Remember, do not think about other kinds of online activities, only about those that involve *[description of activities]*.

Attitudes toward Erotica Questionnaire

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The Attitudes Toward Erotica Questionnaire (ATEQ) includes scales measuring attitudes about harmful and positive effects of erotica, as well as attitudes toward its restriction and regulation. Because of the wide variety of sexually explicit material, the questionnaire is not designed to investigate attitudes toward erotica in general. A social scientist can adapt the questionnaire to examine attitudes about the type of erotic material most appropriate for her/his research—either a specific medium (e.g., *Playboy*) or a general form (e.g., X-rated movie). This questionnaire is designed for a college student or general adult population.

Development

In a study at a university in the midwestern United States, 663 students (52% female) responded to items about four types of sexually explicit materials: "magazines like *Playboy*," "magazines like *Hustler*," "adult bookstore magazines," and "X-rated movies and videos like *Deep Throat*" (Lottes, Weinberg, & Weller, 1993). From a varimax factor analysis with an orthogonal rotation of the 84 responses (21 per erotic type) of these students, one major factor emerged. This factor accounted for 63 percent of the variance with all factor loadings having an absolute value greater than .71. Thus, although properties of the individual *Harmful, Positive*, and *Restrict* scales are presented here, analysis based on one large random student sample (70% response rate) suggests that attitudes toward erotica are organized along a simple binary good/bad dimension.

There also exists an extended Dutch adaptation of the ATEQ measure that was factor analyzed to produce a four-factor solution including the following factors: *Harmful, Especially for Women, Positive Attitude, Sexually Stimulating*, and *Harmful for Men* (Vanwesenbeeck, 2001).

Response Mode and Timing

The response options to each item are one of the five-point Likert-type choices: 1 (*strongly disagree*), 2 (*disagree*), 3 (*no opinion*), 4 (*agree*), and 5 (*strongly agree*).

Respondents indicate the number from 1 to 5 corresponding to their degree of agreement/disagreement with each item. Each set of 21 items for a particular type of erotica takes 8 minutes for completion.

Scoring

For each type of erotica, nine items (numbered 1, 4, 6, 7, 9, 10, 12, 20, and 21) assess its harmful effects and form a *Harmful* scale; seven items (numbered 5, 11, 13, 15, 17, 18, and 19) assess its positive effects and form a *Positive* scale; and five items (numbered 2, 3, 8, 14, and 16) assess its restriction and form a *Restrict* scale.

For 11 of the items, an *agree* response indicates a pro-erotica attitude and for 10 items an *agree* response indicates an anti-erotica attitude. To decrease the probability of a response set, the 21 items of the *Harmful, Positive*, and *Restrict* scales are not grouped together but placed randomly in the questionnaire. To obtain the scale

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scores for the *Harmful* and *Positive* scales, the responses to the items of each respective scale are summed. For the *Harmful* scale, scores can range from 9 to 45 and the higher the score, the more harm has been attributed to the erotica. For the *Positive* scale, scores can range from 7 to 35, and the higher the score, the more positive the effect attributed to the erotica. For the *Restrict* scale, four of the five items (items numbered 2, 3, 8, and 16) are scored in the reverse direction. For these reverse-direction items, recoding needs to transform all 5s to 1s and 4s to 2s and vice-versa before responses to the five items are summed to give the *Restrict* scale score. For this scale, scores can range from 5 to 25 and the higher the score, the more restrictions on the erotica are supported.

Reliability

In a sample of 663 college students, Cronbach alphas for the *Harmful* scale associated with *Playboy, Hustler*, adult bookstore magazines, and X-rated movies or videos were .90, .85, .84, and .85, respectively. Cronbach alphas for these same materials for the *Positive* scale were .73, .76, .78, and .78, respectively, and Cronbach alphas for the *Restrict* scale were .85, .85, .84, and .85, respectively (Lottes, Weinberg, & Weller, 1993). In another sample of 823 individuals recruited from Amazon's Mechanical Turk, alpha for the overall ATEQ scale was .87 (Anisimowicz & O'Sullivan, 2017). In a sample of 152 U.S. women, the *Harmful, Positive*, and *Restrict* subscales had Cronbach's alpha values of .72 and .70, and .44 respectively (Stone, Graham, & Baysal, 2017).

Subscale reliabilities of the extended Dutch version (Vanwesenbeeck, 2001) range from .64 to .90 (*Harmful, Especially for Women*, α= .90; *Positive Attitude*, α = .85, *Sexually Stimulating*, α = .64; *Harmful for Men*, α = .69)

Validity

Lottes, Weinberg, and Weller (1993) found that respondents who were more religious, less sexually active, and viewed erotica less often evaluated all four types of sexually explicit material as being more harmful and having fewer positive effects, and supported more restrictions on their availability than did respondents who were less religious, more sexually active, and viewed erotica more often. As expected, males and those who had seen a specific type of sexually explicit material reported higher scores on the *Positive* scale and lower scores on the *Harmful* and *Restrict* scales than did females and those who had not seen the erotic material. Another study found that higher scores on the ATEQ were associated with lower scores on religiosity ($r = -.31$), higher on permissive sexual attitudes ($r = .38$), and a higher number of past sexual partners ($r = .17$; Anisimowicz & O'Sullivan, 2017).

The extended Dutch version (Vanwesenbeeck, 2001) has been associated with frequency of watching sexually explicit materials (*Harmful, Especially for Women,* $r = -.21$; *Positive Attitude,* $r = .27$, *Sexually Stimulating,* $r = .30$; *Harmful for Men,* $r = -.26$).

Bloom, Gutierrez, and Lambie (2017) used a sample of 373 counselling professionals to develop a new 10-item, two-factor solution: (a) ATEQ *Restrict*, and (b) ATEQ *Exploitive*. The *Restrict* subscale was correlated with opinions of public displays of eroticism ($r = -.78$) and diverse sexual practices ($r = -.62$). Similar correlations were found with the *Exploitive* subscale.

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Exhibit

Attitudes toward Erotica Questionnaire

Indicate how strongly you agree or disagree with each of the following statements by writing the number corresponding to one of the five response options below in the space provided.

	1 Strongly Disagree	2 Disagree	3 No Opinion	4 Agree	5 Strongly Disagree
1. The material exploits women.	○	○	○	○	○
2. The material should be publicly sold (magazines) and publicly shown (movies).	○	○	○	○	○

3.	The material should be available to adults.	○	○	○	○	○
4.	The availability of the material leads to a breakdown in community morals.	○	○	○	○	○
5.	The material can improve sex relations among adults.	○	○	○	○	○
6.	I feel the material is offensive.	○	○	○	○	○
7.	The material exploits men.	○	○	○	○	○
8.	The material should be available to minors (under 18).	○	○	○	○	○
9.	The material increases the probability of sexual violence.	○	○	○	○	○
10.	In this material, the positioning and treatment of men is degrading to men.	○	○	○	○	○
11.	The material may provide an outlet for bottled-up sexual pressures.	○	○	○	○	○
12.	In this material, sex and violence are often shown together.	○	○	○	○	○
13.	This material can enhance the pleasure of masturbation for women.	○	○	○	○	○
14.	This material should be made illegal.	○	○	○	○	○
15.	The material may teach people sexual techniques.	○	○	○	○	○
16.	This material should be protected by the 1st Amendment (freedom of speech and the press).	○	○	○	○	○
17.	People should be made aware of the positive effects of this material.	○	○	○	○	○
18.	This material serves a more positive than negative function in society.	○	○	○	○	○
19.	This material can enhance the pleasure of masturbation for men.	○	○	○	○	○
20.	People should be made aware of the negative effects of this material.	○	○	○	○	○
21.	In this material, the positioning and treatment of women is degrading to women.	○	○	○	○	○

Lifetime Cybersex Experience Questionnaire

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Cybersex is "a real-time communication with another person that occurs through a device connected with the Internet (e.g., computer, cellphone, smartphone) in which one or both people describe or share in other ways sexual activities, sexual behaviors, sexual fantasies, or sexual desires" (Shaughnessy, Byers, & Thornton, 2011, p. 87). The Lifetime Cybersex Experience Questionnaire (LCEQ) is an 8-item behavioral measure designed to assess lifetime prevalence of cybersex experience. We developed the measure to assess sending/receiving as well as reciprocal cybersex behaviors. The LCEQ can be used as an overall measure of cybersex experience or as a measure of experience within a specified partner context. To date, we have used the measure to assess the lifetime prevalence of cybersex experience with three separate types of partners (primary romantic partner, known other who is not a partner, and stranger).

Development

The LCEQ was developed based on the empirically derived conceptual definition of cybersex proposed by Shaughnessy et al. (2011). The qualitative results leading to the definition of cybersex indicated that it was a term that encompassed multiple online sexual behaviors that involved sending, receiving, or exchanging sexually

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explicit content with at least one other person. With this conceptual definition in mind and as described in Shaughnessy and Byers (2013), the first author developed an initial list of six behaviors that were consistent with the term cybersex. Women and men who had experience with cybersex or who were sexuality researchers reviewed the items and provided feedback on the clarity of wording, fit with the conceptual definition, and breadth of behaviors represented. The wording of three items was altered based on this feedback and two items were added.

Response Mode and Timing

The LCEQ can be administered in online checklist or paper survey format. It was designed as a checklist of activities that people may have engaged in online. Participants select each of the items they have ever engaged in. In the development of the LCEQ, we administered the measure as a single checklist that participants completed for three types of partners at once (using a table format in which each column represented a different partner). They selected each item they had ever engaged in with the respective type of partner. The measure could also be used without specifying the partner context or by specifying only one partner context in the instruction. The LCEQ takes approximately 2 to 5 minutes to complete.

Scoring

We have used the LCEQ as a dichotomous measure of lifetime prevalence (yes or no) of cybersex experience within three types of relationships and within versus outside of a primary committed relationship. To do so, participants are given a score of 1 if they select at least one of the 8 items on the LCEQ for a particular partner context; they score 0 if they select none of the items. The 8 items on the LCEQ also can be totaled to create a measure of lifetime variety of cybersex experience (i.e., how many specific cybersex activities people have engaged in).

Reliability

In a community sample recruited online, the LCEQ was internally consistent for cisgendered heterosexual men and women and for cisgendered sexual minority men and women (Courtice & Shaughnessy, 2018; Shaughnessy & Byers, 2014; See Table 1). We also found evidence of temporal stability in a subset of the heterosexual and sexual minority samples separately. Specifically, 74 heterosexual participants completed the measure at two time-points. Of these, 96.0 percent who reported a lifetime cybersex experience on the LCEQ at Time 1 also reported it at Time 2. For the 67 sexual minority participants who completed the measure at both time points, 88.1 percent endorsed lifetime cybersex experience at Time 2.

Validity

As evidence of content-oriented validity of the LCEQ, we compared participants' responses to the LCEQ with their responses to the Global Measure of Cybersex – a single-item measure of lifetime cybersex experience that included a definition of cybersex (Shaughnessy et al., 2011) in the instructions. In a heterosexual sample, 71.5 percent of participants reported cybersex on both measures; that is, they were concordant in their responses (Shaughnessy & Byers, 2013). Concordance (saying yes to the single-item measure and at least one item on the LCEQ) also was stable across time (kappa = .53, $p > .001$). In a sexual minority sample (Courtice & Shaughnessy, 2018), 85.9 percent were concordant in their responses and concordance was relatively stable across time (kappa = .21, $p = .01$).

To explore whether there was bias in participants' responses to the LCEQ, we conducted a discriminant function analysis to determine whether people only endorsing the LCEQ and not the Global Measure of Cybersex differed in their age, gender, number of offline sex partners, online experience generally, social desirability, frequency of solitary-arousal OSA experience, and frequency of cybersex

TABLE 1
Summary of Prevalence of Lifetime Cybersex Experience and Scale Alphas by Sample

Author (year)	*N*	Sample details	Relationship type	Cronbach's alpha	Prevalence of lifetime cybersex experience (%)
Shaughnessy & Byers (2013)	376	108 cisgendered heterosexual men and 268 cisgendered heterosexual women	With a primary partner (PP)	.87	Only in this context 37%
			Outside of a primary relationship (non-partners; NP)	.90	PP and NP 61%
Shaughnessy & Byers (2014)	369	105 cisgendered heterosexual men and 264 cisgendered heterosexual women	With a primary partner	.87	82.4
			With a known other who is not a primary partner (known non-partner)	.91	45.8
			With an unknown other (stranger)	.91	37.1
Courtice & Shaughnessy (2018)	246	103 cisgendered sexual minority men and 143 cisgendered sexual minority women	With a primary partner	.86	83.7
			With a known other who is not a primary partner (known non-partner)	.91	66.7
			With an unknown other (stranger)	.91	61.8

activities (Shaughnessy & Byers, 2013). This analysis was only conducted with the heterosexual sample. We found that people with greater offline (number sex partners) and online (frequency of solitary-arousal and cybersex activities) sexual experience were more likely to be concordant in their reports (i.e., report cybersex experience on both measures) and less likely to report their experience only on the LCEQ. This suggests that LCEQ items provide a means for people to report cybersex experiences without calling those experiences cybersex (a term that may have negative connotations). Additionally, the lack of significant relationships with sociodemographic variables and social desirability suggests that there are no inherent response biases on the LCEQ stemming from age, gender, use of the Internet generally, or social desirability.

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Exhibit

Lifetime Cybersex Experience Questionnaire

People do a lot of different sexual and/or intimate things on the Internet that include other people. People also do these kinds of activities with different kinds of partners. Below is a list of activities that some people do, and that you may have experienced. For each activity, please check the box if you have *ever* done the activity with a primary partner, a known non-partner, and/or an unknown other.

A *Primary Partner* is a person who was your primary romantic partner at the time of the activity. This person might still be your partner or the relationship may have ended.

A *Known Non-partner* is someone you knew but who was not your primary partner at the time of the activity. This could be a friend, colleague/classmate, ex-partner, or partner outside of a primary relationship.

Unknown Other is someone you do not know at all and had not met at the time of the activity.

If you had a partner outside of your primary relationship, these experiences go with "known non-partner."

I have done this with …	Primary Partner	Known Non-partner	Unknown Other
1. Created a story based on sexual fantasies with another person where you each add to the story as it goes.	○	○	○
2. Described specific sexual acts you would do to another person as if they were happening.	○	○	○
3. Had someone describe specific sexual acts they would do to you as if they were happening.	○	○	○
4. Described in detail a sexual activity or sexual scene back and forth with another person as if it was happening.	○	○	○
5. Described your sexual fantasies and/or sexual desires to another person.	○	○	○
6. Had another person describe their sexual fantasies and/or sexual desires to you.	○	○	○
7. Behaved sexually for another person to watch.	○	○	○
8. Watched someone behave sexually.	○	○	○

29 Sociosexuality and Sexual Sensation Seeking

Sexual Sensation Seeking Scale

Seth C. Kalichman,[1] *University of Connecticut*

The Sexual Sensation Seeking Scale assesses the dispositional need for varied, novel, and complex sexual experiences and the willingness to take personal physical and social risks for the sake of enhancing sexual sensations. Sexual sensation seeking is therefore a behaviorally specified derivative of the personality disposition sensation seeking, which in turn is derived from the trait known as extraversion (Zuckerman, 1994). Sexual sensation seeking is behaviorally defined as a dimension of sensation seeking and should not be considered an alternative or replacement for the sensation-seeking construct. The item content of the Sexual Sensation Seeking Scale is sex-specific and does not confound substance use or other conceptual factors with sexual risk taking. The Sexual Sensation Seeking Scale was designed as a psychometric assessment of sexual adventurism or sexual risk taking in adolescents and adults. The scale has been used primarily in research with adults on their risks for sexually transmitted infections, including HIV/AIDS.

Development

The Sexual Sensation Seeking Scale was originally derived from the Sensation Seeking Scale (Zuckerman, 1994), with items redefined for sexual relevance. A three-step process was used to develop the original scale. The first step involved carefully examining the item content of Zuckerman's Sensation Seeking Scale (Zuckerman, 1994) and selecting items that demonstrated the highest loadings on the factors from Zuckerman's original factor analysis (e.g., thrill and adventure seeking, disinhibition, boredom susceptibility; Zuckerman, 1994). The second step involved conducting focus groups with adults on the appropriateness of the item content and framing of items for sexual content. For example, we revised the item "I like wild and uninhibited parties" to "I like wild and uninhibited sexual encounters." The final step involved clarifying content and refining wording of the original scale items with additional focus groups of gay, bisexual, and heterosexual men and women. Items were refined following community feedback and were placed on 4-point scales: 1 (*Not at all Like Me*), 2 (*Slightly Like Me*), 3 (*Mainly Like Me*), 4 (*Very Much Like Me*). Following initial scale development research (Kalichman et al., 1994), the items were further refined with original items that tapped sexually coercive behavior replaced with items reflecting sexual adventurism. The final scale consists of 10 items developed for use with men and women and has shown utility with adolescents and adults of all ages.

Response Mode and Timing

The 10-item Sexual Sensation Seeking Scale requires less than 5 minutes to self-administer or interview administer.

Scoring

The scale does not have formally developed subscales. Scoring involves summing the items or taking the mean response (sum of items/10). There are no reverse-scored items.

Reliability

The Sexual Sensation Seeking Scale has demonstrated excellent internal consistency across several relevant diverse populations, including male (α = .83) and female (α = .81) college students (Gaither & Sellbom, 2003), community samples of men and women (αs range from .79 to .83; Hendershot, Stoner, George, & Norris, 2007; Maisto et al., 2004), sexually transmitted disease clinic patients in South Africa (α = .71; Kalichman, Simbayi, Jooste, Vermaak, & Cain, 2008), gay and bisexual men (αs range from .75 to .79; Kalichman et al., 1994; Kalichman & Rompa, 1995), and HIV-positive men (α = .83; O'Leary, Fisher, Purcell, Spikes, & Gomez, 2007). Item-to-total correlations range from .25 to .79, with no single item substantially reducing

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or improving the internal consistency when deleted from the total scale. The scale has also demonstrated acceptable time stability over 2 weeks (r = .69; Kalichman & Rompa, 1995) and 3 months (r = .78; Kalichman et al., 1994).

Validity

The Sexual Sensation Seeking Scale has demonstrated evidence for its construct validity. Kalichman et al. (1994) found that among gay and bisexual men the scale correlated with rates of unprotected intercourse (r = .32), numbers of sexual partners (r = .38), and alcohol use in sexual contexts (r = .23). Kalichman and Rompa (1995) found the scale correlated with numbers of sex partners in men (r = .22) and women (r = .39). Gaither and Sellbom (2003) reported that the scale correlated with number of one-night-stand sexual encounters for men (r = .31) and women (r = .40), an association also reported by Hendershot et al. (2007). Sexual Sensation Seeking Scale scores also correlate significantly with the perceived pleasure of an array of sexual activities, whereas the scale is inversely associated with sexual risk reduction practices, including condom use (Kalichman & Rompa, 1995). A similar pattern of associations between sexual sensation seeking and a variety of sexual practices was found in a sample of adolescents in Spain (Gutiérrez-Martínez, Bermúdez, Teva, & Buela-Casal, 2007). Hart et al. (2003) found that gay and bisexual men who practice anal sex as both the receptive and the insertive partner score higher on the scale than men who practice either receptive or insertive anal sex. Evidence for the scale's discriminant validity was demonstrated by Berg (2008), who found that the Sexual Sensation Seeking Scale was the single best discriminating factor between gay and bisexual men who practice unprotected sex with limited concern about becoming HIV infected and men who do not.

Other Information

The Sexual Sensation Seeking Scale is in the public domain and available for open use. National Institute of Mental Health (NIMH) grant R01-MH71164 supported preparation of this chapter.

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Exhibit

Sexual Sensation Seeking Scale

A number of statements that some people have used to describe themselves are given below. Read each statement and then select the number to show how well you believe the statement describes you.

	1 Not at all like me	2 Slightly like me	3 Mainly like me	4 Very much like me
1. I like wild "uninhibited" sexual encounters.	○	○	○	○
2. The physical sensations are the most important thing about having sex.	○	○	○	○

3. My sexual partners probably think I am a "risk taker."	○	○	○	○
4. When it comes to sex, physical attraction is more important to me than how well I know the person.	○	○	○	○
5. I enjoy the company of sensual people.	○	○	○	○
6. I enjoy watching "X-rated" videos.	○	○	○	○
7. I am interested in trying out new sexual experiences.	○	○	○	○
8. I feel like exploring my sexuality.	○	○	○	○
9. I like to have new and exciting sexual experiences and sensations.	○	○	○	○
10. I enjoy the sensations of intercourse without a condom.	○	○	○	○

Revised Sociosexual Orientation Inventory

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The construct of sociosexuality or sociosexual orientation captures individual differences in the tendency to have casual, uncommitted sexual relationships. The term was introduced by Alfred Kinsey, who used it to describe individual differences in sexual permissiveness and promiscuity that he found in his ground-breaking survey studies on sexual behavior (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). The amount of scientific research on sociosexuality increased markedly when Simpson and Gangestad (1991) published the Sociosexual Orientation Inventory (SOI), a seven-item self-report questionnaire that assesses sociosexual orientations along a single continuous dimension from "restricted" (indicating a tendency to have sex exclusively in emotionally close and committed relationships) to "unrestricted" (indicating a tendency for sexual relationships with low commitment and investment, often after short periods of acquaintance and with changing partners). On average, men tend to be more unrestricted than women in their sociosexual orientations, though there are also large individual differences within both sexes (Schmitt, 2005). The SOI has been successfully applied in many published studies from fields as diverse as social, personality, and evolutionary psychology, sexuality research, gender studies, biological anthropology, and cross-cultural research (Simpson, Wilson, & Winterheld, 2004).

Despite its popularity, the SOI has repeatedly been criticized (Asendorpf & Penke, 2005; Penke & Asendorpf, 2008; Townsend, Kline, & Wasserman, 1995; Voracek, 2005; Webster & Bryan, 2007). Conceptually, it has been doubted that a single unitary dimension accurately reflects individual differences in sociosexuality. Psychometrically, the SOI has received criticism for its sometimes low internal consistency, multifactorial structure, skewed score distribution, open response items that invite exaggerated responses, multiple alternative scoring methods that yield incoherent results, and the formulation of one item (Item 4) that makes the SOI inappropriate for singles.

Development

The revised Sociosexual Orientation Inventory (SOI-R) is a 9-item self-report questionnaire that was developed to fix all these issues (Penke & Asendorpf, 2008). It assesses three facets of sociosexuality: Past *Behavior* in terms of number of casual and changing sex partners, the explicit *Attitude* towards uncommitted sex, and sexual *Desire* for people with whom no romantic relationship exists. All items are answered on rating scales. The first two items of the Behavior facet were taken from the original SOI. They ask for the number of sexual partners in the last 12 months and the lifetime number of "one-night stands." The third behavioral item assesses the number of partners with whom one had sex despite a lack of long-term relationship interest. Similarly, the first two *Attitude* items (asking for acceptance of sex without love and for comfort with casual sex) are identical with two items from the SOI, while a new item (asking about requiring the prospect of a long-term relationship before consenting to sex) replaces an SOI attitude item with overly long and complicated text. Finally, three new items assess the *Desire* facet, which was not very well represented in the original SOI (Penke & Asendorpf, 2008). They ask for the frequency with which one experiences spontaneous sexual fantasies or sexual arousal when

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encountering people in everyday life with whom no committed romantic relationship exists.

In a series of studies, the SOI-R items were chosen from a pool of 47 items using exploratory factor analysis and item analysis (Penke, 2006). Confirmatory factor analysis supported that they represent distinctive facets of sociosexuality with low to moderate positive intercorrelations (.17 to .55). The correlation between the *Attitude* and *Behavior* facets was significantly larger in women than in men, but otherwise the factorial structure is invariant between the sexes, showing that the SOI-R is equally appropriate for men and women (Penke & Asendorpf, 2008).

An analysis of 8,522 participants from an online study indicates that the SOI-R is appropriate for individuals of any normal-range educational level, including hetero-, bi- and homosexuals, singles and individuals of any relationship/marital status, and at least the age range of 18 to 60 years (Penke, 2006; data partly available on http://www.larspenke.eu/en/research/soi-r.html). However, some facets are problematic for sexually inexperienced and asexual individuals.

Response Mode and Timing

All items of the SOI-R use Likert-type rating scales with the same number of response alternatives, which makes the SOI-R appropriate for both paper-and-pencil and online studies. Two alternative response scale formats exist for the SOI-R, one with nine and the other with five response alternatives. Both show comparable psychometric properties. The 9-point response scale was developed to allow for combining the SOI-R with the original SOI (for details, see Penke & Asendorpf, 2008); however, for the majority of applications I recommend the 5-point response scale, since most subjects (especially non-students) find it easier to discriminate between five than between nine response alternatives. The SOI-R takes 1–2 minutes to complete.

Scoring

For Items 1 to 3, values of 1 to 5 (5-point response scale) or values of 1 to 9 (9-point response scale) should be assigned to the responses. Thus, all nine items have values from 1 to 5 (5-point scale) or 1 to 9 (9-point scale). Item 6 should be reverse-keyed. Items 1 to 3 are aggregated (summed or averaged) to form the *Behavior* facet. Items 4 to 6 form the *Attitude* facet, and Items 7 to 9 form the *Desire* facet. Finally, all nine items (after reverse scoring item 6) can be aggregated to form a full scale score that represents the global sociosexual orientation, similar to the full score of the original SOI. Since most SOI-R scores (except *Behavior*) usually show marked sex differences, results should be analysed separately for men and women, or alternatively sex should be statistically controlled in all analyses. Descriptive statistics for average facet and full scale scores for both response formats can be found in Table 1.

TABLE 1
Descriptive Statistics, Reliabilities, and Effect Sizes for Sex Differences for Both SOI-R Response Scale Formats

		N	Cronbach's α	r_{tt} (1 year)	*M*	*SD*	Sex difference (Cohen's *d*)
5-point scale							
SOI-R	Male	2728	.85	—	2.19	1.10	.00
Behavior	Female	5821	.78	—	2.19	.95	
SOI-R	Male	2706	.81	—	3.54	1.18	.45
Attitude	Female	5794	.81	—	3.01	1.20	
SOI-R	Male	2687	.82	—	3.45	1.01	.86
Desire	Female	5748	.82	—	2.61	.96	
SOI-R	Male	2647	.82	—	3.07	.82	.57
	Female	5632	.83	—	2.60	.80	
9-point scale							
SOI-R	Male	1026	.85	.83	2.76	1.83	.06
Behavior	Female	1682	.84	.86	2.65	1.73	
SOI-R	Male	1026	.87	.73	6.42	2.33	.43
Attitude	Female	1682	.83	.79	5.41	2.37	
SOI-R	Male	1026	.86	.68	5.62	1.91	.86
Desire	Female	1682	.85	.39	3.96	1.94	
SOI-R	Male	1026	.83	.83	4.93	1.50	.61
	Female	1682	.83	.78	4.01	1.52	

Note. r_{tt} = test–retest correlation. The results for the 5-point response scale are from an unpublished online study (Penke, 2006). The results for the 9-point response scale are from Study 1 in Penke and Asendorpf (2008). More detailed results, split by subsamples, can be found on http://www.larspenke.eu/en/research/soi-r.html

Reliability

As can be seen in Table 1, the SOI-R facet and total scores show good internal consistencies for both response formats. Additionally, all scores except the *Desire* facet show good 1-year retest stability. The lower retest stability of the *Desire* facet appears to relate to its transactions with romantic relationship status, with women in particular showing more restrictive desires when starting a new relationship and less restrictive desires when separating (see Penke & Asendorpf, 2008).

Validity

Since its publication eleven years ago, the SOI-R has been used in hundreds of research studies. Google Scholar lists over 680 publications referring to the original article by Penke and Asendorpf (2008). In two large studies, Penke and Asendorpf (2008) demonstrated that the SOI-R full scale score and the SOI showed very similar relationships to established correlates of the sociosexuality, including sex differences, past and future relationship and sexual behaviors, romantic infidelity, mate choice preferences, sex drive, personality traits like shyness and sensation seeking, and flirting behavior towards an attractive opposite-sex stranger. Thus, there is strong evidence that the SOI-R offers the same predictive validity that has been shown for the SOI (Simpson et al., 2004).

However, more detailed analyses revealed a highly distinctive pattern of relationships for the three SOI-R facets, supporting their discriminant validity. For example, sex differences were pronounced for *Desire*, intermediate for *Attitude* and non-existent for *Behavior* (Table 1). Rammsayer, Borter, and Troche (2017) confirmed these results in structural equation models and additionally showed a complimentary pattern for masculine and feminine gender role characteristics, with masculinity positively and femininity negatively predicting both *Behavior* and *Attitude*, but neither predicting *Desire* over and above biological sex. In Penke and Asendorpf (2008), only *Desire* made unique contributions to the prediction of past sexual and relationship behaviors, observer-rated attractiveness, self-perceived mate value, and female flirting behavior, while *Attitude* appeared responsible for the effects of sociosexuality on mate preferences, assortative mating, and a romantic partner's flirtatiousness outside the relationship, and *Desire* had strong independent effects on relationships with sex drive, relationship quality, and male flirting behavior. Furthermore, *Behavior* and *Desire*, but not *Attitude*, predicted the number of sexual partners and changes in romantic relationship status over the next 12 months. Thus, *Behavior, Attitude*, and *Desire* apparently reflect rather unique components of sociosexuality that should be studied separately in order to understand the dynamics that underlie sociosexual orientations.

Other Information

The SOI-R can freely be used for research purposes. The items of 25 different language versions (Afrikaans, Chinese, Czech, Danish, Dutch, English, Farsi, Finnish, French, German, Greek, Hungarian, Icelandic, Italian, Japanese, Malaysian, Norwegian, Polish, Portuguese, Serbian/Bosnian, Slovakian, Slovenian, Spanish, Swedish, and Turkish) can be downloaded from http://www.larspenke.eu/en/research/soi-r.html

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Exhibit

Revised Sociosexual Orientation Inventory

Please respond honestly to all of the following questions. Your responses will be treated confidentially and anonymously.

	0	1	2	3	4	5–6	7–9	10–19	20 or more
1. With how many different partners have you had sex within the past 12 months?	○	○	○	○	○	○	○	○	○
2. With how many different partners have you had sexual intercourse on one and only one occasion?	○	○	○	○	○	○	○	○	○
3. With how many different partners have you had sexual intercourse without having an interest in a long-term committed relationship with this person?	○	○	○	○	○	○	○	○	○

Please respond honestly to all of the following questions. Your responses will be treated confidentially and anonymously.

	1 Strongly disagree	2	3	4	5	6	7	8	9 Strongly agree
4. Sex without love is OK.	○	○	○	○	○	○	○	○	○
5. I can imagine myself being comfortable and enjoying "casual" sex with different partners.	○	○	○	○	○	○	○	○	○
6. I do *not* want to have sex with a person until I am sure that we will have a long-term, serious relationship.	○	○	○	○	○	○	○	○	○

Please respond honestly to all of the following questions. Your responses will be treated confidentially and anonymously.

	1 never	2 very seldom	3 about once every 2 or 3 months	4 about once a month	5 about once every 2 weeks	6 about once a week	7 several times per week	8 nearly every day	9 at least once a day
7. How often do you have fantasies about having sex with someone you are not in a committed romantic relationship with?	○	○	○	○	○	○	○	○	○
8. How often do you experience sexual arousal when you are in contact with someone you are not in a committed romantic relationship with?	○	○	○	○	○	○	○	○	○
9. In everyday life, how often do you have spontaneous fantasies about having sex with someone you have just met?	○	○	○	○	○	○	○	○	○

Sociosexual Orientation Inventory

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In the 1940s and 1950s, comprehensive surveys of the sexual practices of North American men (Kinsey, Pomeroy, & Martin, 1948) and women (Kinsey, Pomeroy, Martin, & Gebhard, 1953) documented that people differ dramatically on several "sociosexual" attitudes and behaviors. Although men, as a group, displayed greater sexual permissiveness than women on most sociosexual attitudes and behaviors (e.g., men have more permissive attitudes toward casual sex, and they are more likely to have sexual affairs), one of the most striking features of the Kinsey data is that much more variability in sociosexual attitudes and behaviors exists *within* each sex than between men and women. Some women, for example, are more sexually permissive than most men, and some men are less permissive than most women.

The Sociosexual Orientation Inventory (SOI; Simpson & Gangestad, 1991) was developed to measure individual differences in willingness to engage in casual, uncommitted sexual relationships. The SOI assesses individuals' past sexual behavior, anticipated (future) sexual behavior, the content of their sexual fantasies, and their attitudes toward engaging in casual sex without commitment and emotional investment. Individuals who score high on the SOI have an *unrestricted* sociosexual orientation. These individuals report having a larger number of different sexual partners in the past year, anticipate having more partners in the next 5 years, have had more one-night stands ("hook-ups"), fantasize more often about having sex with people other than their current (or most recent) romantic partner, and believe that sex without emotional ties is acceptable. Individuals who score low on the SOI have a *restricted* sociosexual orientation. These individuals report fewer sexual partners in the past year, anticipate fewer partners in the next 5 years, are less likely to engage in "one-night stands," rarely fantasize about extra-pair sex, and do not believe in having sex without love and commitment.

Response Mode and Timing

Items 1–3 on the SOI (those that inquire about past and future sexual behavior) require respondents to write down specific numbers of sexual partners. Items 4–7 (those that inquire about fantasies and sexual attitudes) are answered on Likert-type scales. The SOI takes 1–2 minutes to complete.

Scoring

The SOI has seven items. Two items ask respondents to report on their past sexual behavior: Item 1 (the number of sexual partners in the past year) and Item 3 (the number of times they have had sex with someone on only one occasion). Item 2 assesses future sexual behavior (the number of partners anticipated in the next 5 years). Item 4, answered on a Likert-type scale, inquires about sexual fantasies (how often they fantasize about having sex with someone other than their current [or most recent] romantic partner). Items 5, 6, and 7, all answered on Likert-type scales, ask about respondents' attitudes toward engaging in casual sex. These seven items load on a higher-order factor labeled Sociosexuality.

Items 5, 6, and 7 are then aggregated (summed) to create the attitudinal component of the SOI. The following weighting scheme is used when aggregating the five components: SOI = 5X (Item 1) + 1X (Item 2) + 5X (Item 3) + 4X (Item 4) + 2X (aggregate of Items 5–7). To ensure that Item 2 does not have disproportionate influence on the total SOI score, the maximum value of Item 2 is limited to 30 partners. This weighting scheme approximates the scores that individuals would receive if the five SOI components were transformed to *z* scores, unit-weighted, and then summed. Scores based on the current weighting scheme correlate at or above .90 with a unit-weighting system (Simpson & Gangestad, 1991).

SOI scores can range from 10 (a maximally restricted orientation) to 1,000 (a maximally unrestricted orientation). The normal range in college samples is 10–250. Because men tend to score higher on the SOI than women (Simpson & Gangestad, 1991, 1992), respondents' gender should be partialed before statistical analyses are conducted, or analyses should be performed separately on women and men.

Some respondents will occasionally report very high numbers for Items 1–3. In college samples, 30 is the maximum value for Item 2. If respondents report more than 20 partners for Items 1 or 2, these individuals may be outliers who could have undue influence on the results. Thus, outlier detection should *always* be done prior to analyzing SOI scores.

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Reliability

The SOI is internally consistent (average Cronbach alpha = .75; Simpson & Gangestad, 1991, 1992). Test–retest reliability over 2 months is high (r = .94; Simpson & Gangestad, 1991; see Simpson, Wilson, & Winterheld, 2004, for additional information).

Validity

Predictions for individuals who have restricted or unrestricted sociosexual orientations can be derived from the theoretical construct of sociosexuality (see Gangestad & Simpson, 1990; Simpson et al., 2004). Predictive validity evidence for the SOI is reviewed in Simpson et al. (2004). Evidence for its convergent and discriminant validity properties also exists. With regard to convergent validity, for example, more unrestricted individuals (relative to more restricted ones): (a) engage in sex earlier in their romantic relationships, (b) are more likely to have sex with more than one partner during a given time period, and (c) tend to be involved in sexual relationships characterized by less investment, less commitment, less love, and weaker emotional ties (Simpson & Gangestad, 1991). More unrestricted individuals also score higher on other scales known to tap related constructs (e.g., sexual permissiveness, impersonal sex).

More unrestricted people also desire, choose, and acquire romantic partners who have different attributes compared to more restricted people (Simpson & Gangestad, 1992). For example, more unrestricted individuals prefer partners who are more physically attractive and have higher social status, and they place less emphasis on kindness, loyalty, and stability. More restricted persons prefer partners who are kinder and more affectionate, more faithful and loyal, and more responsible, and they place less weight on attractiveness and social status. In dating initiation studies (Simpson, Gangestad, & Biek, 1993), more unrestricted persons—especially men—display more nonverbal behaviors known to facilitate rapid relationship development (e.g., more smiling, laughing, maintaining direct eye contact, flirtatious glances; for further validity information, see Simpson et al., 2004).

In terms of discriminant validity, Simpson and Gangestad (1991) found that more restricted persons (a) do *not* have appreciably lower sex drives and (b) do *not* score higher on scales assessing sexuality-based constructs that should not correlate with the SOI (e.g., sexual satisfaction, sex guilt, sex-related anxiety).

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Exhibit

Sociosexual Orientation Inventory

Please answer all of the following questions *honestly*. Your responses will be treated as confidential and anonymous. For the questions dealing with behavior, write your answers in the blank spaces provided. For the questions dealing with thoughts and attitudes, select the appropriate number on the scales provided. The term "sexual intercourse" refers to genital sex.

1. With how many different partners have you had sex (sexual intercourse) within the past year?

   _____

2. How many different partners do you foresee yourself having sex with during the next five years? (Please give a specific, *realistic* estimate.)

   _____

3. With how many different partners have you had sex on *one and only one* occasion?

   _____

4. How often do you fantasize about having sex with someone other than your current dating partner (when you are in a relationship)?

   ○ 1 Never
   ○ 2 Once Every Two or Three Months
   ○ 3 Once a Month
   ○ 4 Once Every Two Weeks
   ○ 5 Once a Week
   ○ 6 A Few Times Each Week
   ○ 7 Nearly Every Day
   ○ 8 At Least Once a Day

	1 I Strongly Disagree	2	3	4	5	6	7	8	9 I Strongly Agree
5. Sex without love is OK.	○	○	○	○	○	○	○	○	○
6. I can imagine myself being comfortable and enjoying "casual" sex with different partners.	○	○	○	○	○	○	○	○	○
7. I would have to be closely attached to someone (both emotionally and psychologically) before I could feel comfortable and fully enjoy having sex with him or her.	○	○	○	○	○	○	○	○	○

Index