

## ORIGINAL RESEARCH—OUTCOMES ASSESSMENT

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# Development and Validation of a Five-Factor Sexual Satisfaction and Distress Scale for Women: The Sexual Satisfaction Scale for Women (SSS-W)

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### ABSTRACT

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**Introduction.** This article presents data based on the responses of over 800 women who contributed to the development of the Sexual Satisfaction Scale for Women (SSS-W).

**Aim.** The aim of this study was to develop a comprehensive, multifaceted, valid, and reliable self-report measure of women's sexual satisfaction and distress.

**Methods.** Phase I involved the initial selection of items based on past literature and on interviews of women diagnosed with sexual dysfunction and an exploratory factor analysis. Phase II involved an additional administration of the questionnaire, factor analyses, and refinement of the questionnaire items. Phase III involved administration of the final questionnaire to a sample of women with clinically diagnosed sexual dysfunction and controls.

**Results.** Psychometric evaluation of the SSS-W conducted in a sample of women meeting DSM-IV-TR criteria for female sexual dysfunction and in a control sample provided preliminary evidence of reliability and validity. The ability of the SSS-W to discriminate between sexually functional and dysfunctional women was demonstrated for each of the SSS-W domain scores and total score.

**Conclusion.** The SSS-W is a brief, 30-item measure of sexual satisfaction and sexual distress, composed of five domains supported by factor analyses: contentment, communication, compatibility, relational concern, and personal concern. It exhibits sound psychometric properties and has a demonstrated ability to discriminate between clinical and nonclinical samples.

**Key Words.** Sexual Satisfaction; Sexual Distress; Sexual Communication; Female Sexual Dysfunction

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### Introduction

Sexual satisfaction is a broad construct closely linked to overall relationship satisfaction [1–5]. Numerous studies have found that sexual satisfaction is positively associated with indicators of relationship quality such as love [6–8], commitment [9], and stability [9], and is inversely related to likelihood of divorce [3,10]. Many factors have been discussed as contributing to a woman's sense of sexual satisfaction. These include social factors

such as age, marital status, and income level [11]; personality/affective factors such as self-esteem [12], sexual guilt [13], selfishness [14], empathy [15], irritability [5], and anger [16]; and background variables such as physical affection, positive sexual attitudes in the family of origin [17], and sexual education [18].

The factor most commonly discussed in relation to sexual satisfaction is communication between partners. Greater sexual satisfaction has been reported by married individuals who disclose

more about both nonsexual [19] and sexual aspects of their relationship [19,20]. The results of a telephone survey of sexuality and marital variables conducted among 996 Canadians revealed that the item "good sexual communication" was the best predictor of sexual satisfaction for all subjects except men over the age of 60 years [21]. Effective communication between partners could contribute to sexual satisfaction by facilitating closeness and intimacy, and by informing partners about sexual desires and preferences that, in turn, could lead to enhanced arousal and orgasm. Indeed, feeling incapable of communicating sexual desires has been a common attribute of orgasm problems, and sexually assertive women report higher levels of desire, orgasm ability, and sexual satisfaction [22].

The manner and degree to which women's sexual satisfaction is linked to sexual function/dysfunction is not well understood. Findings from studies that have reported on this relation are generally limited by the lack of comprehensive and validated measures of sexual dysfunction and/or satisfaction. Analyses of the U.S. National Health and Social Life Survey [23] indicated that low desire and arousal concerns were the categories most strongly associated with dissatisfaction in women. Frank and colleagues [24] found that sexual dysfunction was also related to dissatisfaction among married couples, and the relation was particularly strong in women with arousal problems. Discrepancy between couples in reported levels of sexual desire has also been negatively associated with sexual satisfaction [25]. In a study of married Chinese couples, Renaud and Byers [26] reported a relationship between both one's and one's partner's sexual problems and sexual satisfaction, and that greater frequency of both affectionate and sexual behavior was associated with greater sexual satisfaction.

With the increase in research aimed at developing new treatment methods for women's sexual dysfunctions over the past several years, a better understanding of the link between women's sexual functioning and satisfaction is called for. While end point criteria for treatment effectiveness such as increased frequency of sexual thoughts and behaviors, enhanced genital and subjective arousal, and enhanced orgasm frequency and intensity are undeniably important considerations, the clinical relevance of such changes may be questionable if not accompanied by clinically meaningful improvements in overall sexual satisfaction. Widely accepted as integral to the diag-

nosis of most categories of female sexual dysfunction is the notion of personal distress [27,28]. Yet, to our knowledge, no studies have examined the relation between what constitutes satisfaction and what constitutes distress within the sexual realm.

Based on a review of the sexual satisfaction literature [1–26], we propose a primary distinction between *personal* and *relational* components of sexual satisfaction, both of which, we believe, are necessary to fully understand what constitutes sexual satisfaction in women. The literature suggests two main facets of *relational* sexual satisfaction: communication and compatibility. Perceived sexual communication is the most frequently cited contributor of sexual satisfaction in the literature [19–21]. Although compatibility has not previously been proposed as an umbrella construct, we believe that global appraisal of compatibility is an important, distinct, and measurable facet of sexual satisfaction. It reflects frequently described contributing factors such as perceived compatibility of sexual desire [25], sexual beliefs, values [29], and attitudes [30,31], and perceived couple similarity [32]. With regard to *personal* components of sexual satisfaction, these would include both global judgements of overall sexual satisfaction such as that assessed by most current assessment instruments (e.g., Female Sexual Function Index (FSFI) [33]; Brief Index of Sexual Functioning for Women [34]), and subjective levels of distress about particular sexual self concerns.

In this study we present data based on the responses of 886 women who contributed to the development of the Sexual Satisfaction Scale for Women (SSS-W). The SSS-W was developed to provide a comprehensive measure of sexual satisfaction and sexual distress that would benefit researchers and clinicians interested in further understanding what constitutes sexual satisfaction in women and how it relates to levels of sexual functioning. In Phase I of this study, we targeted development of an assessment tool for the two *relational* aspects of sexual satisfaction, communication and compatibility, and one facet of *personal* sexual satisfaction, global contentment. In Phase II of this study, we targeted development of an assessment tool for a second aspect of *personal* sexual satisfaction, distress. The final SSS-W scale represents the first multifaceted sexual satisfaction and distress scale that has been validated on a clinically diagnosed sample of women with sexual dysfunction.

### Phase I: Initial Item Selection

#### Methods

Based on recurrent themes in the sexual satisfaction literature, 22 items were written to represent communication and compatibility dimensions of *relational* sexual satisfaction, as well as overall global assessment of *personal* sexual satisfaction, which we refer to as "contentment."

The format of the items was a conventional questionnaire with items presented as brief descriptive statements to which respondents rate their level of agreement/disagreement on a 5-point Likert scale. Scale interval anchors were *Strongly Disagree* = 1, *Disagree* = 2, *Neutral* = 3, *Agree* = 4, and *Strongly Agree* = 5. The 22-item questionnaire, a demographics questionnaire, and several other measures not relevant to the current study were administered to 538 females enrolled in psychology classes at the University of British Columbia, Vancouver, Canada in exchange for course credit. Ethnicity of the participants was 57% Caucasian and 43% Asian. Subjects ranged in age from 18 to 40 years. Participants completed questionnaires in groups of 5–10 individuals in large testing rooms. Adequate space was provided for each participant to maximize privacy. Participants who registered for these testing sessions were aware of the sexual nature of the research. Female researchers obtained informed consent, gave instructions, and answered any questions during the testing sessions. To ensure confidentiality, each participant was randomly assigned a number associated with their data. Participants were informed that should they experience discomfort during the study, they could stop participation without any academic penalty or loss of credit. Completed questionnaire packets were placed in a large "drop box" as they left the testing room. Consent forms were stored separately from the questionnaires to ensure confidentiality. The research was approved by the University of British Columbia Institutional Review Board.

#### Results

We inspected three and four factor solutions, based on unweighted least squares extraction followed by oblique rotation to simple structure via the direct oblimin method. Four eigenvalues exceeded a value of 1. The fourth factor was defined by four items, only one of which loaded >0.50 and two of which also loaded on additional factors. Because the fourth factor was weakly defined and difficult to interpret, we opted for a

three-factor solution. The three factors accounted for 54% of the total item variance. Those items loading most highly and uniquely on each of the three factors were retained as marker items for each factor. We subsequently decided to collapse two very similar compatibility items into one item, and made minor wording changes to a few other items to improve their readability.

Twelve new items were written to address the DSM-IV-TR (American Psychiatric Association, 1994) diagnostic criterion of personal distress. As part of an unrelated study, during the clinician-administered DSM-IV-TR interview, 48 women (age range = 19–53 years; mean age = 32.9 years) who were diagnosed with Female Sexual Arousal Disorder (FSAD) and/or Hypoactive Sexual Desire Disorder (HSDD), and/or Female Orgasmic Disorder (FOD) were asked if they were distressed because of their sexual difficulties and, if so, why? The 12 distress items were generated based on their responses. These modifications resulted in a total of 30 items (contentment = 6, communication = 6, compatibility = 6, concern/distress = 12).

### Phase II: Subscale Addition and Factor Analyses

#### Methods

##### Procedure

The revised 30-item SSS-W questionnaire, a demographics questionnaire, the FSFI [33], and several additional measures not relevant to the current study were administered to 119 women enrolled in psychology classes at the University of Texas at Austin during the 2000–2001 school year in exchange for course credit. The FSFI is a brief, 19-item self-report measure of female sexual function that provides scores on six domains of sexual function and has been validated on women with clinically diagnosed FSAD [33], HSDD [35], and FOD [35]. The testing procedures were identical to that used in Phase I above. The research was approved by the University of Texas at Austin Institutional Review Board.

##### Participants

Subjects were aged 18 years and older, sexually experienced (nonvirgins), and currently involved in a steady, dating relationship. Thirteen percent of the women were married; 87% were single. The length of participant's current relationship was as follows: 6 months or less, 53%; 6–12 months, 20%; 13 months–5 years, 26%; more than 5 years, 1%. Subjects ranged in age from 18 to 42 years.

Ethnic breakdown was: Caucasian 66%, Hispanic 18%, Asian 9%, African American 4%, other 3%. Mean FSFI domain scores were: Desire 4.61, Arousal 5.3, Orgasm 5.2, Pain 5.4, and Satisfaction 5.4. These scores fall within the range of that reported for sexually functional women [29].

### Results

Based on the results of the Phase I factor analysis and the inclusion of new items to measure concern/distress, we expected that the Phase II items would exhibit a clear, four-factor structure. We therefore conducted a principle components analysis on the intercorrelations among the 30 Phase II items, extracting four factors and rotating the factors to oblique simple structure via the direct oblimin method. The four factors accounted for

60% of the total item variance, and the pattern of item loadings on the factors corresponded closely to the expected factors of Contentment, Compatibility, Communication, and Concern/Distress (see Table 1).

Although these results supported a multifaceted conception of sexual satisfaction that distinguishes relational and affective components, they also highlighted potential content distinctions that might serve as a basis for further refinement and improvement of the scales. Most notably, one item written to measure distress (#26) loaded instead on the global contentment factor, a result that alerted us to the preponderance of *relational* concerns/distress among the candidate distress items, with only one item targeting self-oriented distress (#26). From a theoretical standpoint we felt it

**Table 1** Factor analysis of the 30-item Phase II SSS-W

| Item   | Factors |       |       |       |
|--|---------|-------|-------|-------|
|  | 1       | 2     | 3     | 4     |
| <b>Contentment</b>   |         |       |       |       |
| 1. I feel content with my present sex life.  | 0.86    |       |       |       |
| 2. I feel something is missing from my present sex life.   | -0.83   |       |       |       |
| 3. I feel I don't have enough emotional closeness.   | -0.69   |       |       |       |
| 4. I feel content with the frequency of sexual intimacy.   | 0.65    |       |       |       |
| 5. I don't have any problems or concerns about sex.  | 0.62    |       |       |       |
| 6. Overall I am satisfied with my sex life.  | 0.72    |       |       |       |
| <b>Communication</b>   |         |       |       |       |
| 7. My partner gets defensive when discussing sex.  |         | -0.52 | -0.46 |       |
| 8. My partner and I don't discuss sex openly.  |         | -0.51 |       |       |
| 9. I usually feel comfortable discussing sex.  |         | 0.74  | 0.34  |       |
| 10. My partner usually feels comfortable discussing sex.   |         | 0.68  |       |       |
| 11. I have no difficulty talking about emotions.   |         | 0.62  |       |       |
| 12. My partner has no difficulty talking about emotions.   |         | 0.78  |       |       |
| <b>Compatibility</b>   |         |       |       |       |
| 13. Feel partner isn't sensitive or aware about sexual desires.  |         |       | -0.58 | -0.44 |
| 14. Feel partner and I are not sexually compatible enough.   |         |       | -0.62 | -0.37 |
| 15. Partner's beliefs about sex are too different from mine.   |         |       | -0.57 |       |
| 16. I often feel upset about my partner wanting sexual intimacy more often than I do.                      |         |       | -0.65 |       |
| 17. I sometimes feel that I am not physically attracted to my partner enough.                              | -0.36   |       | -0.42 |       |
| 18. I often wish my partner would be a lot more adventurous and open-minded during sex.                    |         |       | -0.81 |       |
| <b>Concern/Distress</b>  |         |       |       |       |
| 19. Partner will become frustrated.  |         |       |       | -0.76 |
| 20. Sexual difficulties will adversely affect relationship.  |         |       |       | -0.78 |
| 21. Partner may have an affair.  |         |       |       | -0.87 |
| 22. Partner is sexually unfulfilled.   |         |       |       | -0.68 |
| 23. Partner views me as less of a woman.   |         |       |       | -0.73 |
| 24. I've disappointed my partner.  | -0.28   |       |       | -0.67 |
| 25. I am frustrated with my sexual difficulties.   |         |       | -0.38 | -0.50 |
| 26. I feel sexually unfulfilled.   | -0.51   |       |       | -0.30 |
| 27. I wonder if my partner wishes my body were different in some way (e.g. larger breasts, smaller waist). |         |       |       | -0.53 |
| 28. I'm worried that my partner is negatively comparing me to past relationships he has had.               |         | -0.43 |       | -0.68 |
| 29. I'm worried that my partner will think my sexual difficulties are his/her fault.                       |         |       | -0.49 | -0.60 |
| 30. I'm worried that my sexual difficulties have become the focus of my relationship.                      | -0.31   | -0.35 |       | -0.63 |
| Eigenvalue   | 7.5     | 5.1   | 8.0   | 8.0   |

Factor loadings <0.25 have been suppressed. Wording of items 1-15, 19-25 have been abbreviated (see Appendix for full wording). Items were not reverse-scored for the purpose of the factor analyses. The direction of the factor loadings have been reflected where necessary such that, in all cases, higher values indicate greater satisfaction.

important to distinguish between concern regarding the well-being of her partner and relationship, and concern regarding a woman's own personal erotic pleasure. Together, these considerations led us to construct equal numbers of personal and relational distress items by dropping four Relational Concern items having the lowest factor loadings [27,28,29,30], revising the wording of two other Concern items [26,27] to more clearly target self-oriented distress, and writing four new items to measure self-oriented distress, thereby resulting in six personal and six Relational Concern items in the final scale. The four new Concern items (all of which were based on the responses of women interviewed with female sexual dysfunction (FSD) in Phase I) were: "I'm worried that my sexual difficulties might cause me to seek sexual fulfillment outside my relationship," "I'm so distressed about my sexual difficulties that it affects the way I feel about myself," "I'm so distressed about my sexual difficulties that it affects my own well-being," and "My sexual difficulties annoy and anger me." Three Compatibility items [16,17,18] were slightly reworded to increase their readability. The resulting 30-item SSS-W measures five domains of sexual satisfaction: Contentment, Communication, Compatibility, Relational Concern, and Personal Concern, with six items per factor.

### Phase III: Validation on a Clinical Sample of Women with Female Sexual Dysfunction and Age-Matched Controls

#### Methods

##### Procedure

Participants in Phase III were recruited via local radio and newspapers advertisements and were each paid \$50.00 for their participation. Inclusion criteria were: between 18 and 70 years, and currently involved in a stable, sexually active relationship. Participants who met these criteria were scheduled for two sessions conducted in the Female Sexual Psychophysiology Laboratory at the University of Texas at Austin. During the first session, participants were interviewed by a trained clinician to determine whether or not they met DSM-IV-TR [27] criteria for any of the following: HSDD, FSAD, FOD, dyspareunia, vaginismus, or sexual anxiety disorder. After the DSM-IV-TR interview, participants filled out the 30-item revised SSS-W, a demographics questionnaire, the FSFI [33], the Locke Wallace Marital Adjustment Test (MAT) [36], and some additional measures

not relevant to the present study, in a private and confidential setting. The MAT is a 15-item self-report measure of marital satisfaction or quality, as well as agreement/disagreement on a number of issues (finances, recreation, affection, friends, sex, conventionality, conflict resolution, and confiding) and has been shown to reliably discriminate between maritally satisfied and dissatisfied women [37]. The wording of certain items was changed from "spouse" to "partner" to account for women who were not married.

Between 4 and 5 weeks after the first session, participants returned for a second session during which they filled out a second SSS-W as well as additional measures not relevant to the current study. They were given a chance to ask any questions regarding the study, were debriefed, and paid for their participation. The research was approved by the University of Texas at Austin Institutional Review Board.

#### Participants

One hundred and eighty-one women completed the first session of the study. Seventy-nine women did not meet criteria for HSDD, FSAD, FOD, dyspareunia, vaginismus, or sexual anxiety disorder and were considered sexually functional (mean age = 27.6 years; range = 18–53 years). One hundred and two women met criteria for FSD (mean age = 30.0 years, range = 18–56 years). Fifty-five (54%) of the women with FSD met criteria for FSAD; 47 (46%) met criteria for HSDD; 70 (67%) met criteria for FOD; and 4 (4%) met criteria for a sexual pain disorder. Fifty-five (54%) of the women with FSD met criteria for more than one sexual dysfunction (FSAD and FOD,  $N = 14$ ; HSDD and FOD,  $N = 15$ ; FSAD and HSDD,  $N = 6$ ; FSAD, HSDD, and FOD,  $N = 19$ ; FSAD, FOD, and Pain,  $N = 1$ ). Of the 181 women who completed the first session, 152 returned for a second session. This sample included 86 of the women with FSD and 66 of the control women.

Participant characteristics are reported in Table 2. An independent samples  $t$ -test revealed a trend toward sexually dysfunctional women being slightly older than sexually functional women,  $t(1) = 3.62$ ,  $P = 0.059$ . Likelihood ratios indicated that the two groups did not significantly differ on race/ethnicity,  $LR(4) = 2.55$ ,  $P = 0.64$ ; education,  $LR(4) = 3.29$ ,  $P = 0.51$ ; or use of hormone replacement therapy,  $LR(1) = 0.49$ ,  $P = 0.40$ . Results from chi-square analyses indicated that the groups did not differ significantly on annual income,  $\chi^2 = 1.50$ ,  $P = 0.47$ . There was a trend toward

**Table 2** Phase III participant characteristics

|                                      | FSD N = 102       | Controls N = 79   | P value |
|--------------------------------------|-------------------|-------------------|---------|
| Age                                  |                   |                   | 0.06    |
| Mean ( $\pm$ SEM)                    | 30.0 years (0.92) | 27.6 years (0.87) |         |
| Range                                | 18–56 years       | 18–53 years       |         |
| Ethnicity N (%)                      |                   |                   | 0.64    |
| Caucasian                            | 79 (78)           | 57 (72)           |         |
| African American                     | 4 (4)             | 4 (4)             |         |
| Native American                      | 0 (0)             | 1 (1)             |         |
| Hispanic                             | 10 (10)           | 9 (11)            |         |
| Asian                                | 3 (3)             | 5 (6)             |         |
| Other                                | 6 (6)             | 3 (4)             |         |
| Education N (%)                      |                   |                   | 0.51    |
| High school/GED                      | 17 (17)           | 8 (10)            |         |
| College                              | 67 (70)           | 62 (80)           |         |
| Graduate school                      | 13 (13)           | 8 (10)            |         |
| Annual income N(%)                   |                   |                   | 0.47    |
| <50,000                              | 56 (57)           | 50 (64)           |         |
| 50,000–100,000                       | 31 (31)           | 18 (23)           |         |
| >100,000                             | 12 (12)           | 10 (13)           |         |
| Marital status N (%)                 |                   |                   | 0.06    |
| Married                              | 27 (27)           | 10 (13)           |         |
| Divorced                             | 12 (12)           | 10 (13)           |         |
| Single                               | 60 (61)           | 58 (74)           |         |
| Children (% Yes)                     | 31 (31)           | 13 (17)           | 0.02    |
| Hormone replacement therapy (% Yes)  | 2 (4)             | 3 (4)             | 0.40    |
| Antidepressant use (% Yes)           | 9 (9)             | 2 (3)             | 0.06    |
| Frequency of sexual activity         |                   |                   | 0.007   |
| <once per month                      | 1 (1)             | 1 (1)             |         |
| 1–2 per month                        | 20 (20)           | 6 (8)             |         |
| 1–2 per week                         | 48 (49)           | 32 (42)           |         |
| 3–4 per week                         | 25 (25)           | 22 (29)           |         |
| >4 per week                          | 5 (5)             | 16 (21)           |         |
| FSFI domain scores* (Mean $\pm$ SEM) |                   |                   |         |
| Desire                               | 3.57 (0.12)       | 4.56 (0.10)       | <0.001  |
| Arousal                              | 3.88 (0.13)       | 5.30 (0.08)       | <0.001  |
| Lubrication                          | 4.23 (0.16)       | 5.54 (0.08)       | <0.001  |
| Orgasm                               | 3.38 (0.16)       | 5.24 (0.11)       | <0.001  |
| Pain                                 | 5.05 (0.14)       | 5.74 (0.10)       | <0.001  |
| Satisfaction                         | 3.98 (0.14)       | 4.93 (0.13)       | <0.001  |

The FSFI scores reported here were included in the calculation of the FSFI scores reported in Meston (2003).

\* Higher scores represent higher levels of function for all domains except Pain.

more sexually dysfunctional women being married,  $\chi^2 = 5.61$ ,  $P = 0.06$ , and receiving antidepressant treatment,  $LR(1) = 3.63$ ,  $P = 0.057$ , compared to functional women. As expected, there were significant group differences in frequency of sexual activity,  $\chi^2 = 14.16$ ,  $P = 0.007$ . FSFI domain scores differed significantly between FSD and control women. Women with sexual dysfunction reported lower levels of desire, arousal, lubrication, orgasm, satisfaction, and higher levels of sexual pain.

## Results

### Factor Analyses

In view of our Phase II factor analysis results and our revisions to the concern/distress items, we expected that intercorrelations among the final 30 SSS-W items would demonstrate a clear, five-factor structure. To evaluate this, we first con-

ducted a principal components analysis using the combined sample of FSD and control women. The five factors accounted for 63% of the total item variance. The pattern of factor loadings in the combined sample corresponded clearly to the scale assignments described in Phase II: all items loaded most highly on their assigned factors with the exception of two Contentment items, one of which loaded most highly on the Relational Concern factor (“I feel I don’t have enough emotional closeness”) while the other loaded most highly on the Personal Concern factor (“I don’t have any problems or concerns about sex”). One Personal Concern item cross-loaded highly on the Compatibility factor (“I may have an affair”).

Next, using only the data for FSD women, we conducted a principal components analysis on the SSS-W item intercorrelations, extracting five factors and rotating the factors to oblique simple

structure via the direct oblimin method. Item loadings of the resulting five factors are presented in Table 3. The five factors accounted for 57% of the total item variance. The first four factors were similar to those obtained in Phase II for sexually functional women, although the global sexual Contentment factor is less well defined here, and two of the Communication items referring to "discussing sex" loaded more highly on the Contentment factor than on the Communication factor. As expected, however, items representing personal concerns defined a different factor from items representing relational concerns, indicating that these sources of sexual dissatisfaction are reasonably distinct among women diagnosed with sexual disorders.

Separate domain scales to represent the five factors of Contentment, Communication, Compati-

bility, Relational Concern, and Personal Concern were scored by summing responses to the six constituent items assigned to each domain (see Table 3). Intercorrelations among the resulting five scales are presented in Table 4. In general, intercorrelations among the scales tended to be lower among FSD women than control group women, suggesting that FSD women had more distinguishable sources of sexual dissatisfaction than sexually functional women. Correlations between Contentment and the remaining domains were moderate to high in magnitude for both FSD and control group women. Correlation between Communication and Compatibility were relatively similar for FSD ( $r=0.50$ ) and control group women ( $r=0.54$ ). Personal Concern showed a relatively low correlation with Communication and Compatibility among FSD women ( $r=0.14$  and

**Table 3** Factor analysis of the Phase III final 30 questions of the SSS-W in women with FSD

| Item  | Factors |       |       |       |       |
|---|---------|-------|-------|-------|-------|
|   | 1       | 2     | 3     | 4     | 5     |
| <b>Contentment</b>  |         |       |       |       |       |
| 1. I feel content with my present sex life.                     | 0.53    |       |       |       | 0.34  |
| 2. I feel something is missing from my present sex life.        | -0.38   | -0.30 |       | -0.29 |       |
| 3. I feel I don't have enough emotional closeness.              |         |       | -0.36 | -0.40 |       |
| 4. I feel content with the frequency of sexual intimacy.        | 0.59    |       |       |       |       |
| 5. I don't have any problems or concerns about sex.             |         |       |       |       | 0.69  |
| 6. Overall I am satisfied with my sex life.                     | 0.59    |       |       |       | 0.44  |
| <b>Communication</b>  |         |       |       |       |       |
| 7. My partner gets defensive when discussing sex.               | -0.61   |       |       |       |       |
| 8. My partner and I don't discuss sex openly.                   | -0.61   | -0.35 |       |       |       |
| 9. I usually feel comfortable discussing sex.                   |         | 0.69  |       |       |       |
| 10. My partner usually feels comfortable discussing sex.        | 0.42    | 0.53  |       |       |       |
| 11. I have no difficulty talking about emotions.                |         | 0.73  |       |       |       |
| 12. My partner has no difficulty talking about emotions.        |         | 0.70  |       |       |       |
| <b>Compatibility</b>  |         |       |       |       |       |
| 13. Feel partner isn't sensitive or aware about sexual desires. |         |       | -0.33 |       |       |
| 14. Feel partner and I are not sexually compatible enough.      |         |       | -0.74 |       |       |
| 15. Partner's beliefs about sex are too different from mine.    |         |       | -0.59 |       |       |
| 16. Partner and I mismatched in sexual intimacy needs.          |         |       | -0.82 |       |       |
| 17. Partner and I not physically attracted enough.              |         |       | -0.37 |       |       |
| 18. Partner and I mismatched in sexual preferences.             |         |       | -0.86 |       |       |
| <b>Relational concern</b>                                       |         |       |       |       |       |
| 19. Partner will become frustrated.                             |         |       |       | -0.83 |       |
| 20. Sexual difficulties will adversely affect relationship.     |         |       |       | -0.84 |       |
| 21. Partner may have an affair.                                 |         | -0.36 |       | -0.50 |       |
| 22. Partner is sexually unfulfilled.                            |         |       |       | -0.77 |       |
| 23. Partner views me as less of a woman.                        |         |       |       | -0.47 |       |
| 24. I've disappointed my partner.                               |         |       |       | -0.80 |       |
| <b>Personal concern</b>   |         |       |       |       |       |
| 25. My sexual difficulties are frustrating to me.               |         |       |       |       | -0.79 |
| 26. My sexual difficulties make me feel sexually unfulfilled.   |         |       |       |       | -0.80 |
| 27. I may have an affair.                                       |         |       | -0.48 |       | -0.28 |
| 28. My sexual difficulties affect how I feel about myself.      |         |       |       |       | -0.82 |
| 29. My sexual difficulties affect my well-being.                |         |       |       |       | -0.69 |
| 30. My sexual difficulties annoy and anger me.                  |         |       |       |       | -0.77 |
| Eigenvalue  | 3.9     | 2.7   | 4.6   | 4.5   | 5.0   |

Questions 1-30 are abbreviated (see Appendix for full wording of items).

Factor loadings <0.25 have been suppressed. Items were not reverse-scored for the purpose of the factor analyses. The direction of the factor loadings have been reflected where necessary such that, in all cases, higher values indicate greater satisfaction.

**Table 4** Phase III domain intercorrelations

|                                  | Contentment | Communication | Compatibility | Relational concern | Personal concern |
|----------------------------------|-------------|---------------|---------------|--------------------|------------------|
| <b>Combined sample</b>           |             |               |               |                    |                  |
| Contentment                      | 1.00        |               |               |                    |                  |
| Communication                    | 0.52*       | 1.00          |               |                    |                  |
| Compatibility                    | 0.67*       | 0.56*         | 1.00          |                    |                  |
| Concern: Relational              | 0.61*       | 0.33*         | 0.46*         | 1.00               |                  |
| Concern: Personal                | 0.70*       | 0.31*         | 0.47*         | 0.66*              | 1.00             |
| <b>Female Sexual Dysfunction</b> |             |               |               |                    |                  |
| Contentment                      | 1.00        |               |               |                    |                  |
| Communication                    | 0.30*       | 1.00          |               |                    |                  |
| Compatibility                    | 0.48*       | 0.50*         | 1.00          |                    |                  |
| Concern: Relational              | 0.41*       | 0.14          | 0.30*         | 1.00               |                  |
| Concern: Personal                | 0.56*       | 0.14          | 0.25*         | 0.35*              | 1.00             |
| <b>Controls</b>                  |             |               |               |                    |                  |
| Contentment                      | 1.00        |               |               |                    |                  |
| Communication                    | 0.71*       | 1.00          |               |                    |                  |
| Compatibility                    | 0.66*       | 0.54*         | 1.00          |                    |                  |
| Concern: Relational              | 0.50*       | 0.45*         | 0.26*         | 1.00               |                  |
| Concern: Personal                | 0.47*       | 0.21          | 0.23          | 0.67*              | 1.00             |

$r = 0.25$ , respectively) and control group women ( $r = 0.21$  and  $r = 0.23$ , respectively). Relational Concern was moderately correlated with Contentment among control group women ( $r = 0.45$ ), but not among FSD women ( $r = 0.14$ ).

#### Reliability

Cronbach's coefficient alpha for the SSS-W domain and total scales are presented in Table 5. In the combined sample, values exceeded 0.80 for all scales except Communication (0.74). In the FSD and control samples, values exceed 0.80 for all scales except Contentment (0.75 and 0.79, respectively) and Communication (both 0.72). The latter values are moderate but satisfactory for very short scales measuring a reasonably broad range of content.

Test-retest reliability (test stability across time) was assessed by comparing the SSS-W domain and total scores from the first session with those obtained 4–5 weeks later during the second session. As can be seen in Table 5, test-retest reliabil-

ity was significant and moderately high for all domains among women with FSD ( $r = 0.62$ – $0.79$ ) and control women ( $r = 0.58$ – $0.79$ ). The highest test-retest reliability was seen among sexually dysfunctional women for the Relational Concern domain ( $r = 0.80$ ).

#### Concurrent Validity

The ability of the SSS-W to differentiate between sexually functional and dysfunctional women was assessed by comparing the mean responses of women with FSD with those of the control women. The results from between-groups analyses of variance revealed significant differences between women with FSD and controls on each of the five SSS-W domains and total score (See Table 6 for means  $[\pm$  SEMs] of the SSS-W items, domains, and total scores by participant group). Not surprisingly, the largest difference between groups was seen for the Personal Concern domain  $F(1,156) = 106.43$ ,  $P < 0.001$ .

**Table 5** Phase III domain characteristics: Reliability

| Domain              | Internal consistency <sup>†</sup> |         |          | Test-retest reliability <sup>‡</sup> |        |          |
|---------------------|-----------------------------------|---------|----------|--------------------------------------|--------|----------|
|                     | Combined sample                   | FSD     | Controls | Combined sample                      | FSD    | Controls |
| Domain              | N = 181                           | N = 102 | N = 79   | N = 152                              | N = 86 | N = 66   |
| Contentment         | 0.83                              | 0.75    | 0.79     | 0.80*                                | 0.65*  | 0.76*    |
| Communication       | 0.74                              | 0.72    | 0.72     | 0.63*                                | 0.62*  | 0.58*    |
| Compatibility       | 0.85                              | 0.81    | 0.82     | 0.78*                                | 0.74*  | 0.72*    |
| Concern: Relational | 0.88                              | 0.85    | 0.80     | 0.86*                                | 0.79*  | 0.72*    |
| Concern: Personal   | 0.90                              | 0.81    | 0.88     | 0.83*                                | 0.73*  | 0.72*    |
| Total score         | 0.94                              | 0.88    | 0.91     | 0.87*                                | 0.76*  | 0.79*    |

\* Correlation significant at  $P < 0.01$ .

<sup>†</sup> Cronbach's alpha (range =  $-1.00$  to  $+1.00$ ).

<sup>‡</sup> Pearson product-moment correlation coefficient (range =  $0$  to  $+1.00$ ).



**Table 6** Phase III concurrent validity

| Item  | FSD<br>Mean ( $\pm$ SEM) | Controls<br>Mean ( $\pm$ SEM) | P value |
|---|--------------------------|-------------------------------|---------|
| Contentment   |                          |                               | <0.001  |
| 1. I feel content with my present sex life.                     | 2.3 (0.13)               | 3.9 (0.15)                    |         |
| 2. I feel something is missing from my present sex life.        | 2.2 (0.14)               | 3.2 (0.16)                    |         |
| 3. I feel I don't have enough emotional closeness.              | 3.2 (0.15)               | 3.5 (0.17)                    |         |
| 4. I feel content with the frequency of sexual intimacy.        | 2.6 (0.14)               | 3.7 (0.15)                    |         |
| 5. I don't have any problems or concerns about sex.             | 1.7 (0.09)               | 3.5 (0.16)                    |         |
| 6. Overall I am satisfied with my sex life.                     | 2.6 (0.10)               | 3.8 (0.09)                    |         |
| Communication   |                          |                               | <0.001  |
| 7. My partner gets defensive when discussing sex.               | 4.0 (0.13)               | 4.4 (0.11)                    |         |
| 8. My partner and I don't discuss sex openly.                   | 3.8 (0.15)               | 4.2 (0.14)                    |         |
| 9. I usually feel comfortable discussing sex.                   | 4.0 (0.13)               | 4.6 (0.10)                    |         |
| 10. My partner usually feels comfortable discussing sex.        | 3.8 (0.13)               | 4.4 (0.11)                    |         |
| 11. I have no difficulty talking about emotions.                | 3.3 (0.15)               | 3.8 (0.15)                    |         |
| 12. My partner has no difficulty talking about emotions.        | 3.0 (0.16)               | 3.4 (0.15)                    |         |
| Compatibility   |                          |                               | <0.001  |
| 13. Feel partner isn't sensitive or aware about sexual desires. | 2.9 (0.14)               | 4.0 (0.15)                    |         |
| 14. Feel partner and I are not sexually compatible enough.      | 3.3 (0.14)               | 4.5 (0.11)                    |         |
| 15. Partner's beliefs about sex are too different from mine.    | 3.4 (0.15)               | 4.1 (0.14)                    |         |
| 16. Partner and I mismatched in sexual intimacy needs.          | 3.0 (0.14)               | 4.2 (0.13)                    |         |
| 17. Partner and I not physically attracted enough.              | 3.8 (0.13)               | 4.2 (0.13)                    |         |
| 18. Partner and I mismatched in sexual preferences.             | 3.1 (0.14)               | 4.2 (0.14)                    |         |
| Relational concern  |                          |                               | <0.001  |
| 19. Partner will become frustrated.                             | 2.6 (0.14)               | 4.3 (0.13)                    |         |
| 20. Sexual difficulties will adversely affect relationship.     | 2.6 (0.14)               | 4.2 (0.14)                    |         |
| 21. Partner may have an affair.                                 | 4.1 (0.13)               | 4.7 (0.08)                    |         |
| 22. Partner is sexually unfulfilled.                            | 2.9 (0.15)               | 4.2 (0.12)                    |         |
| 23. Partner views me as less of a woman.                        | 4.0 (0.13)               | 4.7 (0.09)                    |         |
| 24. I've disappointed my partner.                               | 2.7 (0.14)               | 4.4 (0.12)                    |         |
| Personal concern  |                          |                               | <0.001  |
| 25. Sexual difficulties are frustrating to me.                  | 1.5 (0.09)               | 3.8 (0.17)                    |         |
| 26. Sexual difficulties make me feel sexually unfulfilled.      | 2.1 (0.13)               | 4.0 (0.15)                    |         |
| 27. I may have an affair.                                       | 3.5 (0.17)               | 4.4 (0.14)                    |         |
| 28. Sexual difficulties affect how I feel about myself.         | 2.9 (0.15)               | 4.2 (0.15)                    |         |
| 29. Sexual difficulties affect my well-being.                   | 3.3 (0.14)               | 4.4 (0.13)                    |         |
| 30. Sexual difficulties annoy and anger me.                     | 2.5 (0.15)               | 4.2 (0.16)                    |         |
| Total score   | 88.8 (2.06)              | 123.4 (2.30)                  |         |

Questions 1–30 are abbreviated (see Appendix for full wording of items). All negative keyed items have been reverse-scored in the satisfaction direction such that higher means indicate higher levels of satisfaction.

### Convergent/Discriminant

Convergent validity was assessed by calculating relations between the five SSS-W domain and total scores and the FSFI Satisfaction domain scores. Pearson correlations were conducted on 75 control women and 97 women with FSD for whom data were available for both the SSS-W and FSFI. In general, correlations between scales were higher for sexually functional women ( $r = 0.29$ – $0.70$ ) than for sexually dysfunctional women ( $r = 0.22$ – $0.46$ ). The Contentment domain showed the highest correlation with FSFI Satisfaction for both FSD and control women, and the Relational Concern domain showed the lowest association with FSFI Satisfaction among both functional and dysfunctional women (see Table 7).

We evaluated the discriminant validity of the SSS-W domain scales by examining their correla-

tion with a related, but different, construct—marital satisfaction. For reasons detailed in the Introduction, we expected a certain degree of positive association between all SSS-W domains and marital satisfaction. However, we anticipated that these associations would tend to be stronger for relationship evaluative components of sexual satisfaction (compatibility and communication) than for overt distress components (personal and interpersonal distress). Because global ratings of sexual contentment logically involve both of these components, we expected the size of the marital satisfaction correlation with Contentment to be intermediate in magnitude between that obtained for the relational and distress domains. Data for both the SSS-W and MAT were available for 74 control women, and 96 women with FSD. Among women with FSD, significant correlations were

**Table 7** Phase III domain characteristics: Convergent/discriminant validity

|                     | FSFI satisfaction domain |        |          | Marital adjustment test |        |          |
|---------------------|--------------------------|--------|----------|-------------------------|--------|----------|
|                     | Combined sample          | FSD    | Controls | Combined sample         | FSD    | Controls |
| Domain              | N = 172                  | N = 97 | N = 75   | N = 170                 | N = 96 | N = 74   |
| Contentment         | 0.63*                    | 0.46*  | 0.70*    | 0.36*                   | 0.24*  | 0.50*    |
| Communication       | 0.46*                    | 0.36*  | 0.48*    | 0.52*                   | 0.57*  | 0.41*    |
| Compatibility       | 0.54*                    | 0.39*  | 0.61*    | 0.57*                   | 0.58*  | 0.57*    |
| Concern: Relational | 0.38*                    | 0.22*  | 0.29*    | 0.23*                   | 0.21*  | 0.15     |
| Concern: Personal   | 0.46*                    | 0.27*  | 0.40*    | 0.19*                   | 0.09   | 0.16     |
| Total score         | 0.61*                    | 0.45*  | 0.63*    | 0.46*                   | 0.79*  | 0.47*    |

\*  $P < 0.01$ .

noted for all SSS-W domains except Personal Concern. Among control women, significant correlations were noted for all SSS-W domains except Relational Concern and Personal Concern. In general, the correlations were in the low to moderate range (see Table 7).

To further explore the pattern of associations between SSS-W subscales and these criteria, we conducted a simultaneous multiple regression of the SSS-W subscale scores on the MAT and FSFI Satisfaction domain scores. The SSS-W domain scores explained 42% of MAT score variance, with this association attributable solely to the two relationship evaluative domains, SSS-W Communication ( $\beta = 0.312$ ,  $P = 0.000$ ) and Compatibility ( $\beta = 0.492$ ,  $P = 0.000$ ); beta weights for the remaining domains were not significantly different from zero (Contentment:  $\beta = -0.048$ ,  $P = 0.670$ ; Relational Concern:  $\beta = 0.008$ ,  $P = 0.932$ ; Personal Concern:  $\beta = -0.121$ ,  $P = 0.215$ ). SSS-W domain scores explained 40% of FSFI Satisfaction domain score variance, with that association attributable primarily to SSS-W Contentment ( $\beta = 0.412$ ,  $P = 0.000$ ) and also to Compatibility ( $\beta = 0.207$ ,  $P = 0.028$ ); beta weights for the remaining SSS-W domains were not significantly different from zero (Communication:  $\beta = 0.102$ ,  $P = 0.221$ ; Relational Concern:  $\beta = -0.087$ ,  $P = 0.337$ ; Personal Concern:  $\beta = 0.096$ ,  $P = 0.321$ ).

## Discussion

The purpose of the current study was to develop a comprehensive, valid, and reliable self-report measure of women's sexual satisfaction. Phase I of this study involved the initial selection of items based on past literature on sexual satisfaction and an exploratory factor analysis ( $N = 538$ ) of the SSS-W which resulted in two relational (communication, compatibility) and one personal (contentment) sexual satisfaction domains that were supported by factor analyses. Also, in Phase I addi-

tional items based on interviews of women with diagnosed sexual dysfunction were written to address a second domain of personal sexual satisfaction, namely distress. Phase II involved an additional administration of the SSS-W ( $N = 119$ ) and further refinement of the questionnaire items that resulted in two relational and two personal domains supported by factor analyses: communication, compatibility, contentment, and concern. Phase III involved refinement of the concern questions, the addition of items addressing personal concern regarding relationship issues, and administration of the final 30-item SSS-W to a sample of women with clinically diagnosed sexual dysfunction and controls ( $N = 181$ ).

The final 30-item SSS-W consists of five domains (two relational; three personal) of six items each: communication, compatibility, contentment, relational concern, and personal concern. Items in the communication, compatibility, and contentment domains were written to reflect themes relating to sexual satisfaction noted in prior literature. Specifically, these domains include items relating to ease and comfort such as discussing sexual and emotional issues (communication), compatibility between partners in terms of sexual beliefs, preferences, desires, and attraction (compatibility), and overall global contentment with emotional and sexual aspects of the relationship (contentment). In two separate factor analyses of 538 and 119 sexually functional women, the items in these three domains loaded consistently on the same factors. When administered to a group of sexually dysfunctional women, the pattern was somewhat less clear, with several items in the Contentment and Communication domains loading on different factors. These exceptions were however, theoretically interpretable. For example, the Contentment item referring to "emotional closeness" loaded most highly on Compatibility and Relational Concern; the Contentment item "something is missing from my sex life" loaded equally on Contentment, Compat-

ibility, and Relational Concern. In addition, domain intercorrelations between contentment, communication, and the three other domains were low to moderate among women with FSD (0.14–0.56), providing additional support for the independence of these factors.

Items in the personal sexual satisfaction domains of Relational Concern and Personal Concern were written based on the responses of women with diagnosed sexual dysfunction who replied to the question “Do your sexual concerns distress you? If so, why?” This aspect of sexual satisfaction was included to specifically address the diagnostic criterion “personal distress.” To our knowledge, only one study to date has empirically addressed the issue of personal distress. In a well-designed series of studies, Derogatis and colleagues [38] presented data supporting the validity and reliability of a 12-item unidimensional measure of personal distress. We believe that the findings reported here support the distinction between personal and relational aspects of distress. Responses from the women experiencing sexual dysfunction revealed distress specifically concerning their personal well-being and sexual fulfillment, and distress regarding the impact of their sexual problems on their partner and relationship at large. The results of two separate factor analyses provided support for these two distinct distress factors. We believe that determining whether a woman is distressed for personal or relational reasons could substantially impact her motivation toward treatment and, consequently, the likelihood of treatment efficacy.

Psychometric evaluation of the final 30-item SSS-W in a sample of women meeting DSM-IV-TR criteria for female sexual dysfunction, and in a control sample provided preliminary evidence of the measures reliability and validity. Internal consistency coefficients (Cronbach’s alpha) were in the acceptable range for all domains among both sexually functional and dysfunctional women. Correlations between initial SSS-W responses and those obtained 4–5 weeks later were in the moderate range for functional and dysfunctional women demonstrating acceptable stability of the SSS-W across measurement intervals. In terms of concurrent and divergent validity, correlations between the FSFI Satisfaction domain and SSS-W domain scores varied substantially. In women with FSD and control women, FSFI Satisfaction was moderately correlated with the SSS-W Contentment domain. With the exception of the Compatibility domain, which was also moderately correlated with FSFI

Satisfaction in control women, the remaining factors showed only weak correlations with the FSFI Satisfaction domain among functional and dysfunctional women. These findings support the need for a comprehensive measure of sexual satisfaction. Divergence of the SSS-W from marital satisfaction was indicated by low to moderate correlations between SSS-W domain scores and scores on the Locke-Wallace marital adjustment scale for both FSD and control women. On the other hand, regressions of SSS-W domains on global marital satisfaction and global sexual satisfaction revealed a divergent pattern of relations for the SSS-W domains that supports a basic distinction between affective and relational components of sexual satisfaction.

Domain intercorrelations were generally lower for the FSD versus control group, suggesting that sexual satisfaction may be a more unified construct among sexually functional than dysfunctional women. The ability of the SSS-W to discriminate between sexually functional women and women clinically diagnosed with a sexual dysfunction was demonstrated for each of the SSS-W domain scores as well as for the total score.

### Conclusions

The items that comprise the SSS-W were written based on recurrent themes in the sexual satisfaction literature, and on interviews of women diagnosed with female sexual dysfunction. We used an analogue sample of university women to provide preliminary psychometric evidence of distinct relational and personal aspects of sexual satisfaction in women, and a clinical sample to provide preliminary evidence of the scale’s construct validity. The final SSS-W represents a brief, 30-item, multifaceted measure of women’s sexual satisfaction. It exhibits sound psychometric properties and has a demonstrated ability to discriminate between clinical and nonclinical populations. Further research in a clinical sample is needed to test whether the sexual satisfaction distinctions proposed in this study are effective in providing further insight into clinical aspects of sexual satisfaction in women.

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## Appendix

### The Sexual Satisfaction Scale for Women (SSS-W)

| Question   | Response options  |
|--|---|
| Q1: I feel content with the way my present sex life is.  | 1 = Strongly disagree<br>2 = Disagree a little<br>3 = Neither agree or disagree<br>4 = Agree a little<br>5 = Strongly agree                     |
| Q2: I often feel something is missing from my present sex life.  | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree                     |
| Q3: I often feel I don't have enough emotional closeness in my sex life.   | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree                     |
| Q4: I feel content with how often I presently have sexual intimacy (kissing, intercourse, etc.) in my life.                            | 1 = Strongly disagree<br>2 = Disagree a little<br>3 = Neither agree or disagree<br>4 = Agree a little<br>5 = Strongly agree                     |
| Q5: I don't have <i>any</i> important problems or concerns about sex (arousal, orgasm, frequency, compatibility, communication, etc.). | 1 = Strongly disagree<br>2 = Disagree a little<br>3 = Neither agree or disagree<br>4 = Agree a little<br>5 = Strongly agree                     |
| Q6: Overall, how satisfactory or unsatisfactory is your present sex life?  | 5 = Completely satisfactory<br>4 = Very satisfactory<br>3 = Reasonable satisfactory<br>2 = Not very satisfactory<br>1 = Not at all satisfactory |

## Appendix Continued

| Question   | Response options  |
|--|---|
| Q7: My partner often gets defensive when I try discussing sex.   | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q8: My partner and I do not discuss sex openly enough with each other, or do not discuss sex often enough. | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q9: I usually feel completely comfortable discussing sex whenever my partner wants to.                     | 1 = Strongly disagree<br>2 = Disagree a little<br>3 = Neither agree or disagree<br>4 = Agree a little<br>5 = Strongly agree |
| Q10: My partner usually feels completely comfortable discussing sex whenever I want to.                    | 1 = Strongly disagree<br>2 = Disagree a little<br>3 = Neither agree or disagree<br>4 = Agree a little<br>5 = Strongly agree |
| Q11: I have no difficulty talking about my deepest feelings and emotions when my partner wants me to.      | 1 = Strongly disagree<br>2 = Disagree a little<br>3 = Neither agree or disagree<br>4 = Agree a little<br>5 = Strongly agree |
| Q12: My partner has no difficulty talking about their deepest feelings and emotions when I want him to.    | 1 = Strongly disagree<br>2 = Disagree a little<br>3 = Neither agree or disagree<br>4 = Agree a little<br>5 = Strongly agree |
| Q13: I often feel my partner isn't sensitive or aware enough about my sexual likes and desires.            | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q14: I often feel that my partner and I are not sexually compatible enough.                                | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q15: I often feel that my partner's beliefs and attitudes about sex are too different from mine.           | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |

**Appendix** Continued

| Question  | Response options  |
|---|---|
| Q16: I sometimes think my partner and I are mismatched in needs and desires concerning sexual intimacy. | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q17: I sometimes feel that my partner and I might not be physically attracted to each other enough.     | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q18: I sometimes think my partner and I are mismatched in our sexual styles and preferences.            | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q19: I'm worried that my partner will become frustrated with my sexual difficulties.                    | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q20: I'm worried that my sexual difficulties will adversely affect my relationship.                     | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q21: I'm worried that my partner may have an affair because of my sexual difficulties.                  | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q22: I'm worried that my partner is sexually unfulfilled.   | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q23: I'm worried that my partner views me as less of a woman because of my sexual difficulties.         | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q24: I feel like I've disappointed my partner by having sexual difficulties.                            | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |

**Appendix** Continued

| Question  | Response options  |
|---|---|
| Q25: My sexual difficulties are frustrating to me.  | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q26: My sexual difficulties make me feel sexually unfulfilled.  | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q27: I'm worried that my sexual difficulties might cause me to seek sexual fulfillment outside my relationship. | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q28: I'm so distressed about my sexual difficulties that it affects the way I feel about myself.                | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q29: I'm so distressed about my sexual difficulties that it affects my own well-being.                          | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |
| Q30: My sexual difficulties annoy and anger me.   | 5 = Strongly disagree<br>4 = Disagree a little<br>3 = Neither agree or disagree<br>2 = Agree a little<br>1 = Strongly agree |

**Scoring System**

| Domain             | Questions         | Score range |
|--------------------|-------------------|-------------|
| Contentment        | 1,2,3,4,5,6       | 6-30        |
| Communication      | 7,8,9,10,11,12    | 6-30        |
| Compatibility      | 13,14,15,16,17,18 | 6-30        |
| Concern—Relational | 19,20,21,22,23,24 | 6-30        |
| Concern—Personal   | 25,26,27,28,29,30 | 6-30        |

Individual domain scores are computed by adding the scores of the individual items that comprise the domain. Full Scale Score = (Contentment + Communication + Compatibility + (Relational Concern + Personal Concern/2)).