

Consequences of impaired female sexual functioning: Individual differences and associations with sexual distress

Kyle R. Stephenson* and Cindy M. Meston

Psychology Department, University of Texas at Austin, Austin, TX, USA

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A number of risk factors for sexual distress have been identified, including impairments in sexual function. However, for women, sexual function is only weakly associated with distress levels in many cases. One reason for this disconnect may be that impaired sexual function can have a variety of consequences for the individual's sexual experience and that some consequences may be more or less distressing to different people. Research suggests that some consequences of impaired sexual function may be more distressing to older women and/or for women in longer or less satisfying relationships. To examine the association between consequences of impaired female sexual function and distress, 75 women reporting one or more recurrent difficulties with sexual function in the past month were assessed. Frequency of sexual consequences including decreased physical pleasure, decreased sexual frequency, and negative partner emotional responses, were associated with sexual distress after controlling for the effects of sexual function. Additionally, a number of sexual consequences were rated as more distressing by older women and women in unsatisfying relationships. The idiosyncratic ways in which impairments in sexual function play out in the context of sexual activity may be an important target of future research and clinical interventions for sexual dysfunction.

Keywords: sexual distress; sexual functioning; female sexual dysfunction

Recent epidemiological studies suggest that between 20 and 25% of women in the United States report significant distress regarding their sex lives (Bancroft, Loftus, & Long, 2003; Shifren, Monz, Russo, Segreti, & Johanes, 2008). Subjective well-being regarding one's sex life has been shown to be closely related to overall life satisfaction and happiness in a number of studies (Davison, Bell, LaChina, Holden, & Davis, 2009) and, as such, the high prevalence of distress regarding sex is a significant public health concern. Identifying risk factors of sexual distress is an essential first step toward understanding why women become distressed about their sex lives and in maximizing the effectiveness of clinical interventions.

To date, a number of risk factors for female sexual distress have been identified including partner erectile difficulties, low satisfaction with the romantic relationship, mood disorders, and poor sexual communication (Hayes et al., 2008; Oberg & Fugl-Meyer, 2005). One of the most researched risk factors for sexual distress is impaired sexual functioning – low sexual desire, low sexual arousal, inhibited orgasm, and the

*Corresponding author. Email: krstephenson@gmail.com

presence of sexual pain (Rosen, Brown, Leiblum, Meston, & Shabsigh, 2000). Sexual functioning has been shown to be related to subjective sexual well-being in a number of studies (Hurlbert, Apt, & Rabehl, 1993; Morokoff & Gilliland, 1993) and the DSM-IV-TR (APA, 2000) focuses on impairments in sexual functioning as the primary symptoms constituting female sexual dysfunction (FSD).

However, sexual functioning is not the only, or even a particularly strong, predictor of sexual distress in women. For example, many factors predict subjective sexual well-being over and above sexual functioning (Dundon & Rellini, 2010) and sexual functioning is unrelated to distress in a number of contexts (Stephenson, Hugan, & Meston, 2012; Stephenson & Meston, 2010). Indeed, when controlling for factors such as emotional intimacy in the relationship and general mental health, the association between sexual functioning and sexual distress is often statistically non-significant (Bancroft et al., 2003).

One potential reason for these mixed findings regarding the association between sexual functioning and sexual distress is that impaired sexual functioning is not a uniform phenomenon. Impairments in sexual desire, arousal, orgasm, and pain can have a number of different effects on the woman's sexual experiences including, but not limited to, decreasing her physical pleasure during sex, preventing or disrupting sexual activity, and engendering negative partner responses during sex. These consequences of impaired sexual functioning are likely highly distressing to the individual in many cases, possibly even more so than the impaired functioning itself.

We are not aware of any research that has explicitly assessed the consequences of impaired female sexual functioning on the woman's sexual experience, but a number of findings suggest that the ways in which impaired functioning plays out in the context of coupled sexual activity is an important determinant of sexual distress. For example, one recent study found that low sexual desire was twice as likely to be distressing if the woman was married versus if she was single (Shifren et al., 2008), suggesting that the effect of sexual difficulties on interpersonal interactions with one's partner may be just as influential in determining distress levels as the presence of the sexual difficulty. Additionally, factors such as sexual communication have been shown to be related to sexual distress, but not sexual function (Hayes et al., 2008). Indeed, Barlow's (1986) model of sexual dysfunction highlighted the importance of the consequences of impaired sexual functioning. In his original model, Barlow posited that individuals with sexual arousal difficulties tend to enter into a sexual situation with negative affect and expectancies and that their attentional focus is subsequently drawn to the "public consequences of not performing" (p. 146) or other non-erotic stimuli. More recently, researchers (Nelson & Purdon, 2011) have suggested that the non-erotic thoughts that are detrimental to sexual arousal "may be driven not only by negative sexual schemas, but also [by] quite probable consequences [of impaired sexual functioning]" (p. 404). In sum, although no research of which we are aware has directly assessed the variety of consequences that impaired sexual functioning has for the individual's sexual experience, it is likely that these consequences are of central importance in determining levels of sexual distress.

This assertion (that the consequences of sexual symptoms are important over and above the symptoms themselves in determining distress) is often taken as a given by many treatment providers, especially cognitive behavioral therapists. However, this assumption has not been empirically tested, nor is it necessarily universally true. In

some cases, it is possible for sexual symptoms to be distressing in the absence of negative consequences for the woman's sexual interactions. For example, the phenomenon of persistent genital arousal disorder (Leiblum, 2007) is described as distressing by many women but likely has little direct disruptive impact on sexual interactions. Additionally, many women are distressed by impaired sexual functioning even when not in romantic relationships. Indeed, a number of experts in the field have focused on the symbolic value of sexual difficulties (e.g., Cohen, 1978) with little attention paid to the functional analysis of these symptoms. Given these potential alternatives, it is essential to scientifically establish and explore the role of the consequences of impaired female sexual functioning, rather than assume their importance.

Establishing a link between the consequences of impaired sexual functioning and sexual distress in women is important not only to increase our understanding of sexual dysfunction, but also because these consequences represent potentially meaningful targets of treatment in sex therapy. If therapists can accurately identify the most distressing consequences of impaired sexual functioning and ameliorate those consequences, the impaired functioning may become much less distressing to the individual. These secondary treatment targets are especially important in the area of female sexual dysfunction (FSD) because there are very few empirically validated treatments that effectively and consistently reduce specific sexual symptoms (Heiman, 2002), especially the most commonly reported symptoms of low sexual desire and impaired sexual arousal (Heiman & Meston, 1998).

Given these potential benefits, the general aim of the current study was to assess the association between a number of consequences of impaired female sexual functioning and sexual distress. To meet this aim, we recruited a sample of women reporting recurrent impairments in their sexual functioning. We then created a list of common consequences of impaired female sexual functioning and asked participants (1) how frequently they experienced these consequences over the past month, and (2) how distressing they found each consequence when it did occur. We then performed three sets of analyses. First, we examined the average frequency of each sexual consequence and how distressing each was rated on average. Second, we established the basic psychometric properties of our measure of sexual consequences by computing internal reliability and normality statistics and assessing correlations with measures of sexual, relational, and life satisfaction. Because the measure assesses consequences of specifically sexual difficulties, we predicted that it would be strongly associated with sexual satisfaction, less strongly (but still significantly) associated with relational satisfaction, and most weakly associated with overall life satisfaction. Third, we tested whether each consequence of impaired sexual functioning was associated with participants' distress regarding their sex lives after controlling for the effects of sexual functioning. We predicted that the frequency of these consequences would be associated with sexual distress over and above sexual functioning alone, suggesting that these consequences are related to sexual distress independently of the level of impairment in sexual functioning.

Lastly, we performed a set of exploratory analyses assessing for individual differences in the degree to which specific sexual consequences were seen as distressing. There are, of course, a large number of person-level factors that may explain individual differences in the degree to which sexual consequences are distressing. There is also no research of which we are aware from which we could derive hard predictions. However, factors that could potentially be important are

those that have been shown to moderate the association between sexual functioning and sexual distress in women. A number of studies (Rosen et al., 2009; Stephenson, Rellini, & Meston, in press) have suggested that older women and women with low relationship satisfaction tend to exhibit both higher levels of sexual distress on average and a weaker association between sexual functioning and distress than younger women and women with high relationship satisfaction. In each of these cases, it is possible that the women who exhibit a weaker association between sexual functioning and distress may do so because the consequences of impaired functioning are more distressing to them than merely the level of their sexual functioning. In sum, our hypothesis for these exploratory analyses was that the sexual consequences of impaired sexual functioning would be more distressing for older women and women with low relationship satisfaction.

Method

Participants and procedure

Participants ($n = 75$) were recruited from the community through advertisements posted in numerous locations throughout the local mid-sized metropolitan area, and through online advertisements on www.craigslist.org. The advertisements called for women over the age of 18, currently in exclusive heterosexual relationships, and experiencing one or more of the following in the past month: low sexual desire, low sexual arousal, difficulty reaching orgasm, pain or discomfort during or following sexual activity. Given our aim of examining consequences of impaired female sexual functioning in general, not only for women who are highly distressed regarding their sex lives, we did not limit our sample to women who met criteria for a diagnosis of sexual dysfunction. The advertisements stated that study participation involved answering questions about current and past sexual experiences, and that participants would be compensated for their time. Potential participants were screened and received additional study information in telephone interviews. Women who had a serious aversion to sex, were unwilling to engage in sexual activity during the following month, were not healthy enough to engage in sexual activity, or had an untreated serious mental health condition (schizophrenia, bipolar, and/or severe depression that was not managed with therapy and/or medication) were excluded from the study.

Women agreeing to participate attended a clinical intake interview at the Sexual Psychophysiology Lab on the University of Texas at Austin campus where they provided informed consent, answered questions regarding their sexual and relational experiences, and completed a number of online self-report measures. One portion of this intake was a face-to-face semi-structured interview to assess for sexual dysfunction based on DSM-IV-TR criteria performed by a Masters-level clinician with experience in providing sex therapy to individuals and couples. Following the intake, participants completed daily online measures regarding their sexual and relational experiences for four weeks. Each participant agreed to attempt to engage in sexual activity with her partner at least five times over this four-week period.¹ At the conclusion of the four weeks, all participants were provided with monetary compensation, information regarding the treatment of female sexual dysfunction, and referral information for a number of sexual health care providers in the local community. The current analyses utilize data from the intake appointment only. All study protocol was approved by the University of Texas at Austin Institutional Review Board.

Participants had an average age of 27.52 ($SD = 6.92$, range = 20–50) and the average length of their relationships was 47.82 months ($SD = 66.83$ months, range = 3–305 months). Participants were 80% Caucasian, 15% Hispanic, 6% African American, and 5% Asian American. Forty-seven participants (63%) met DSM-IV-TR criteria for one or more diagnoses of sexual dysfunction (i.e., they reported both impaired sexual functioning *and* high levels of personal distress and/or interpersonal difficulty arising from the impaired functioning). Specifically, 27 (36%) met criteria for hypoactive sexual desire disorder, 19 (25%) for female sexual arousal disorder, 23 (31%) for female orgasmic disorder, and 15 (20%) for either dyspareunia or vaginismus. Given that a gynecological exam was not performed, there was no way to confirm the involuntary vaginal spasms associated with vaginismus; however, eight women (11%) appeared to meet this criterion based on self-report accounts. Of participants with at least one FSD diagnosis, the average number of diagnoses was two.

Measures

Sexual functioning

Sexual functioning was assessed using the Female Sexual Function Index (FSFI; Rosen et al., 2000), a 19-item measure assessing six domains of female sexual functioning: desire, arousal, lubrication, orgasm, satisfaction, and pain. The FSFI has demonstrated excellent reliability (Cronbach's $\alpha = .97$) and validity (Meston, 2003). Individual items are scored such that higher values indicate higher levels of functioning, i.e., higher desire, higher arousal, more frequent orgasm, lower pain. Each subscale score consists of the sum of individual items. The satisfaction subscale was utilized as an independent outcome in the current analyses because it represents a distinct construct from sexual functioning. In the current study, Cronbach's α was .93, .93, .96, .87, and .86 for desire, lubrication, arousal, orgasm, and pain, respectively. Cronbach's α for the satisfaction subscale was .88.

Sexual consequences

Sexual consequences were assessed using a newly created seven-item measure that asked participants how frequently they experience a range of outcomes as a result of their difficulties with sexual functioning (difficulties with sexual functioning are defined in the instructions for the measure, see the Appendix). Responses ranged from 1 ("never") to 5 ("always"). Items were scored such that higher scores indicate higher frequency of the consequence. The full-scale score was obtained by summing the individual items. Participants who reported at least some instance of each sexual consequences (i.e., those who did not respond with a 1 on the frequency item) were also asked to rate how distressing they found the consequence when it did occur on a 5-point Likert scale ranging from 1 ("not at all") to 5 ("extremely").

Relationship satisfaction

Relationship satisfaction was measured using the Couples Satisfaction Index (CSI; Funk & Rogge, 2007). The CSI consists of 16 items and has been shown to be reliable (Cronbach's $\alpha = .98$) and valid, exhibiting significant correlations with

multiple scales of relationship satisfaction and effectively differentiate distressed from non-distressed couples. The CSI was constructed to tap subjective satisfaction with the relationship specifically and exhibits minimal overlap with similar but distinct constructs such as relationship “adjustment” or frequency of conflict (Eddy, Heyman, & Weiss, 1991; Ward, Lundberg, Zabriskie, & Berrett, 2009). Items were scored such that higher scores indicated higher levels of satisfaction with the relationship. The full scale score was obtained by summing individual items. Cronbach’s alpha in the current study was .98.

Sexual distress

Sexual distress was measured using the Personal Distress subscale of the Sexual Satisfaction Scale–Women (SSS-W; Meston & Trapnell, 2005). The SSS-W and its subscale have been shown to be internally reliable with coefficient alphas $\geq .72$ for each domain. One-month test–retest reliability ranged from .58 to .79. The full scale and subscale scores have been shown to differentiate between women with and without sexual dysfunction. Scores for the SSS-W are calculated such that higher scores indicate greater well-being (lower levels of sexually-related distress). Coefficient alpha for the Personal Distress subscale in the current study was .86.

Life satisfaction

Overall life satisfaction was assessed using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS consists of five Likert items with higher scores indicating higher levels of life satisfaction. Coefficient alpha for the SWLS has ranged from .79 to .89, with a one-month test–retest reliability of .86 (Pavot & Diener, 2008). The SWLS has been found to be significantly associated with the measures of depression and negative affect. Coefficient alpha in the current study was .90. Means and standard deviations for all measures used in the current study can be found in Table 1.

Table 1. Means and SDs for measures in current sample.

	<i>Range (possible)</i>	<i>Range (observed)</i>	<i>Mean</i>	<i>SD</i>
Personal sexual distress (SSS-W)	6–30	6–27	15.76	5.42
Relationship satisfaction (CSI)	0–81	9–81	60.05	16.88
Sexual function (FSFI without Satisfaction subscale)	6–30	7–26	18.25	4.11
Sexual Satisfaction subscale of the FSFI	1.2–6	1.2–6	3.63	1.45
Satisfaction with Life Scale (SWLS)	5–35	5–35	22.72	7.47
Decreased pleasure	1–5	1–5	3.72	1.10
Disruption of sex	1–5	1–5	2.36	1.15
Decreased frequency	1–5	1–5	3.31	1.40
Partner decreased pleasure	1–5	1–5	2.38	1.29
Partner negative self-emotions	1–5	1–5	2.16	1.15
Partner disappointment/sadness	1–5	1–5	2.45	1.11
Partner anger/frustration	1–5	1–4	1.48	0.84

Results

We began by examining the average frequency of each sexual consequence and the level of distress associated with each sexual consequence. These descriptive statistics are summarized in Figures 1 and 2. The most frequent consequence of impaired sexual functioning was experiencing less physical pleasure during sex ($M_{\text{frequency}} = 3.72/5$; number of participants reporting = 75), whereas the least frequent consequence was the partner expressing anger towards the participant during or after sex ($M_{\text{frequency}} = 1.48/5$; number of participants reporting = 24). The least distressing consequence was decreased physical pleasure during sexual activity ($M_{\text{distress}} = 3.57/5$), whereas the most distressing was the partner expressing anger towards the participant ($M_{\text{distress}} = 4.08/5$).

Next, we computed reliability and normality statistics for the measure of sexual consequences. Cronbach's alpha was .81, suggesting adequate internal reliability and a Shapiro-Wilk test of normality was non-significant ($W = .97, p > .05$), suggesting that the distribution of scores on the measure was relatively normal. Additionally, we computed a number of Pearson product-moment correlations between sexual consequences and measures of sexual satisfaction (the satisfaction subscale of the FSFI), relational satisfaction (CSI), and life satisfaction (SWL). These correlations were generally in line with our predictions: sexual consequences were strongly associated with sexual satisfaction ($r = -.57, p < .001$), significantly but more weakly associated with relational satisfaction ($r = -.28, p < .05$), and marginally significantly associated with overall life satisfaction ($r = -.20, p = .08$). These correlations suggest that the measure effectively captures sexual consequences rather than wider relational or life dynamics.

Next, we performed a series of Linear Regressions with sexual distress (the personal concern subscale of the SSS-W) regressed on the frequency of each sexual consequence in turn while controlling for sexual functioning. All consequences were significant predictors of sexual distress over and above sexual functioning except disruption of sexual activity (see Table 2 for regression coefficients).

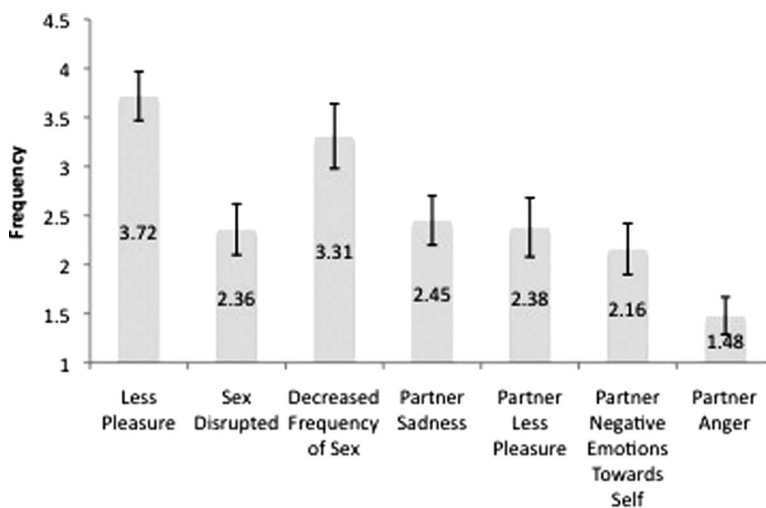


Figure 1. Average frequency of negative consequences of impaired female sexual functioning in the current sample.

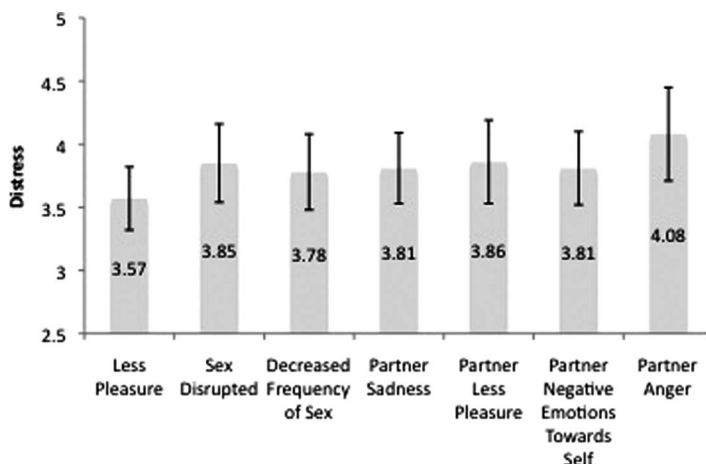


Figure 2. Average distress associated with negative consequences of impaired female sexual functioning in the current sample.

Table 2. Regression coefficients for sexual distress (personal concern subscale of the SSS-W) regressed on sexual consequences controlling for sexual function (FSFI excluding the satisfaction subscale).

Predictor	Model parameters		
	<i>B</i>	<i>SE</i>	<i>t</i>
Decreased pleasure	-1.50	0.59	-2.55*
Disruption of sex	-0.68	0.58	-1.19
Decreased frequency	-1.16	0.48	-2.42*
Partner decreased pleasure	-1.34	0.46	-2.94**
Partner negative self-emotions	-1.13	0.48	-2.37*
Partner disappointment/sadness	-1.03	0.50	-2.06*
Partner anger/frustration	-1.43	0.66	-2.17*

Note: * $p < .05$, ** $p < .01$, *** $p < .001$.

Finally, we performed analyses examining whether age and/or relationship satisfaction predicted the degree to which each sexual consequence was rated as distressing. In each case we included only participants who reported experiencing each consequence to some degree in the past month. Age predicted the degree to which decreased pleasure during sex was distressing, $F(1, 73) = 12.88$, $p < .001$, $R^2 = .14$, and the degree to which decreased frequency of sex was distressing, $F(1, 61) = 4.76$, $p < .05$, $R^2 = .07$, with older women reporting higher levels of distress regarding these consequences. These significant effects were maintained when controlling for length of relationship. Relationship satisfaction predicted the degree to which decreased pleasure during sex was distressing, $F(1, 73) = 3.85$, $p < .05$, $R^2 = .05$, and the degree to which decreased pleasure for the partner was distressing to the participant, $F(1, 46) = 3.58$, $p < .05$, $R^2 = .13$, with women in less satisfying relationships being more distressed regarding these consequences. No factors significantly predicted the degree to which the disruption of sexual activity or negative partner emotional responses were distressing.

Discussion

The goal of the current study was to establish an association between consequences of impaired female sexual functioning and sexual distress and to explore individual differences in the degree to which particular consequences were seen as more or less distressing. Our results suggest that a variety of sexual consequences were distressing over and above sexual functioning on average, but that the degree to which some consequences were distressing to the individual differed based on age and relationship satisfaction. Specifically, although decreased physical pleasure during sex was distressing on average, older women and women who were less satisfied in their relationships tended to be more distressed regarding this consequence of impaired sexual functioning. Older women also rated decreased sexual frequency as more distressing. Additionally, decreases in the partner's pleasure resulting from the participant's sexual difficulties were more distressing to women who were less satisfied with their relationships. In contrast, consequences of impaired sexual functioning such as disruption of sexual activity and the partner expressing negative emotions during or immediately following sex were rated as similarly distressing regardless of age or relationship satisfaction.

The current results have the potential of explaining the mechanisms behind previous research exploring moderators of the association between female sexual functioning and distress. Past studies have shown that sexual functioning is weakly tied to distress for older women and for women in unsatisfying relationships (Rosen et al., 2009; Stephenson, Rellini, & Meston, in press). Specifically, these studies have shown that, for these women, both highly impaired sexual functioning (e.g., a complete absence of sexual desire) and slightly impaired sexual functioning (e.g., occasionally low levels of sexual desire) are associated with relatively high levels of sexually related distress. In other words, improved levels of sexual functioning were not necessarily associated with higher levels of well-being for these women (Stephenson, Rellini, & Meston, in press). The current findings suggest that older women and women in unsatisfying relationships may be more distressed by the most common consequences of impaired functioning (i.e., decreased physical pleasure, decreased frequency of sex, etc.). These consequences likely happen, to some degree, even in the context of only slightly impaired functioning. As such, in the context of slightly impaired sexual functioning, we would predict higher levels of distress for older women and those in unsatisfying relationships, which is precisely what past research has shown.

These findings also provide additional evidence that the consequences of impaired sexual functioning (in addition to the impaired sexual functioning itself) may serve as important targets of clinical intervention, especially in certain personal and relational contexts. For example, a woman presenting with hypoactive sexual desire disorder may be distressed by her low desire for a number of reasons – it may cause her to feel less pleasure during sex, it may make her partner sad or frustrated, etc. In some cases the low desire may be directly amenable to treatment and increasing the woman's level of sexual desire may improve the woman's quality of life (though this is by no means certain). However, in cases of treatment-resistant low desire, an additional or alternative treatment option may be to target the consequences of the impaired functioning that are most distressing to the individual. The current results suggest that addressing these consequences may decrease levels of distress, possibly even in the absence of improved levels of sexual functioning. Indeed, a number of clinical trials for treatments of sexual dysfunction have found

improved levels of sexual satisfaction and distress in the absence of improved sexual functioning (DeAmicis, Goldberg, LoPiccolo, Friedman, & Davies, 1986; LoPiccolo, Heiman, Hogan, & Roberts, 1985). These treatments may in fact be altering the consequences of impaired sexual functioning, making these impairments less distressing.

Further research will be necessary to explain *why* certain consequences of impaired sexual functioning are more distressing to women who are older, or who are in less satisfying relationships. One potentially important factor that may ultimately mediate the degree to which these consequences are distressing is the way in which they are interpreted. Research on cognitive therapy (Sacco & Beck, 1995) has highlighted the important role that interpretations of external events play in subsequent emotional responses and one type of interpretation, causal attributions, has been shown to play an important role in relational interactions (Bradbury & Fincham, 1990). In the study of sexuality, research has suggested that stable and internal attributions of sexual difficulties can be detrimental to sexual functioning (Fichten, Spector, & Libman, 1988; Peterson et al., 1982). Older women in less satisfying relationships may have been experiencing both their sexual impairments and the consequences of these impairments for longer periods of time with little apparent improvement. As such, they may be more likely to interpret the causes of their sexual difficulties as quite stable and/or as internal aspects of themselves or the relationship rather than transient or external, resulting in more intense negative emotional responses. Future research assessing these interpretations of sexual difficulties will be necessary to evaluate these hypotheses.

The current study had a number of limitations. First, we relied on self-report measures of sexual interactions, which have a number of well-known drawbacks including social desirability bias (Meston, Trapnell, & Gorzalka, 1998). Second, our relatively small sample size of 75 women may have limited our ability to detect smaller effects. Future research utilizing larger sample sizes will be necessary to confirm and extend the present findings. Third, we utilized a convenience sample and, as such, it is impossible to calculate the response rate for the current study. It is possible that women who self-selected themselves for the study differed systematically from the population, a limitation that could be addressed by the use of random sampling in future research. Fourth, we did not have access to data from the participants' relational partners. Clearly, measuring the partner's emotional responses second-hand limits the accuracy of the related data. Future research that directly assesses the partner's emotional responses would be ideal. However, it is likely that the woman's perceptions of her partner's emotional responses may have more influence on her sexual distress than do the partner's actual emotions. Fifth, our sample included relatively few older women, with none over the age of 50. Clearly, the consequences of impaired sexual functioning and resulting distress may be quite different for women in their sixties and beyond and future research would benefit greatly from adequately sampling this population. Lastly, given the correlational methods used in the current study, we cannot claim for certain that impaired sexual functioning directly caused the consequences measured here. Alternative explanations include the consequences themselves giving rise to impaired sexual functioning or some third variable affecting both factors. We attempted to minimize this threat to internal validity through both the phrasing of items (i.e., "how often do your sexual difficulties cause...") and through instructions given

during the intake interview, but longitudinal and/or experimental data will be necessary to confirm the causal direction assumed here.

Despite these limitations, the current study adds to a growing literature on the risk factors of female sexual distress. In particular, our results suggest that the consequences of impairments in female sexual functioning may be distressing to women over and above their level of sexual functioning alone and that personal and relational factors may moderate the degree to which particular consequences are distressing. This understanding of sexual dysfunction has the potential to broaden the range of treatments available, potentially improving the efficacy of these treatments and allowing for the personalization of interventions to focus on the aspects of sexual dysfunction besides impaired sexual functioning that are most distressing to the individual and her relationship. Given these potential benefits, we hope that both impaired sexual functioning and the idiosyncratic ways in which it affects the individual's sexual experience will be targets of future research.

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Notes on contributors

Kyle Stephenson is a doctoral candidate in Clinical Psychology at the University of Texas at Austin. He received his BS from Santa Clara University and has been researching issues related to sexual well-being since 2005.

Cindy Meston is a professor of Psychology at the University of Texas at Austin and the head of the Sexual Psychophysiology Lab. She received her doctorate from the University of British Columbia and has published over 100 peer-reviewed articles on human sexuality.

Note

1. This criterion may have biased the sample by excluding women who were unable to engage in sexual activity; however, the requirement was necessary given our aim of assessing the consequences of impaired sexual functioning that occurred during or immediately following sexual activity.

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Appendix: Measure of sexual consequences

In this study, we are defining sexual difficulties as problems you have experienced with sexual functioning. Sexual functioning has four primary areas:

- 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).
- Sexual arousal: a feeling that includes both physical and mental aspects of sexual excitement. It may include feelings of warmth or tingling in the genitals, lubrication, or muscle contractions. 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).
- 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).
- 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.

Difficulties with sexual functioning (desire, arousal, orgasm, and pain) can affect an individual's sexual experience in a number of ways. Below is a list of different ways in which sexual difficulties can affect a person's sexual experience.

We'd like you to rate each of the outcomes below by how often it happens as a result of your sexual difficulties.

(Response options for items below range from 1 = Never to 5 = Always)

- (1) My sexual difficulties cause me to feel less physical pleasure during sex.
- (2) My sexual difficulties lead to disruption of sexual activity (have to stop before one or both partners would like to).

- (3) My sexual difficulties lead to me having sex less often.
- (4) My sexual difficulties lead to my partner expressing negative emotions towards his/herself (e.g. decreased self-esteem, anger at him/herself).
- (5) My sexual difficulties lead to my partner expressing disappointment and/or sadness.
- (6) My sexual difficulties lead to my partner expressing frustration and/or anger towards me.
- (7) My sexual difficulties lead to a decrease in my partner's physical pleasure.

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