Sexual Medicine

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Is Female Sexual Dysfunction Related to Personality and Coping? An Exploratory Study

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DOI: 10.1002/sm2.16

ABSTRACT-

Introduction. Sexual disorders impact up to 43% of women. However, the relationship between sexual dysfunction and psychological variables such as personality traits and coping mechanisms is not well understood.

Aim. To examine personality domains and coping strategies utilized by women with sexual dysfunction in a clinical sample.

Methods. Patients seeking care for female sexual dysfunction (FSD) from a sexual medicine specialist were identified using International Classification of Diseases, Ninth Revision codes. Packets containing informed consent, Female Sexual Function Index (FSFI), Female Sexual Distress Scale-Revised (FSDS-R), Ten Item Personality Index (TIPI), and Brief COPE were mailed to subjects.

Main Outcome Measures. Correlations among FSFI, FSDS-R, TIPI, and Brief COPE.

Results. Of 79 eligible subjects, 50 (63.2%) returned completed questionnaires. The mean age was 40 years (standard deviation 14). Total FSFI and FSDS-R scores confirmed FSD. Correlations between the FSFI and TIPI illustrated trends with the domain of extraversion, suggesting better function in those exhibiting more of this trait (r = 0.285, P = 0.079). Similarly, FSDS-R scores correlated with openness to experience (r = -0.305, P = 0.037) and approached significance for extraversion (r = -0.258, P = 0.080), indicating lower distress in such personality types. When assessing the Brief COPE, use of emotional support, a positive coping strategy, correlated with better orgasm (r = 0.303, P = 0.048) and higher satisfaction (r = 0.331, P = 0.03). Finally, when evaluating TIPI with COPE scores, several significant associations were noted, establishing that personality may influence these adaptive behaviors. **Conclusion.** Many notable relationships between sexual function, personality, and coping are presented. These support a role for consideration of psychological variables when evaluating women presenting for sexual dysfunction. **Crisp CC, Vaccaro CM, Pancholy A, Kleeman S, Fellner AN, and Pauls R. Is female sexual dysfunction related to personality and coping? An exploratory study. Sex Med 2013;1:69–75.**

Key Words. Coping Mechanisms; Personality; Psychology; Sexual Dysfunction

Introduction

F emale sexuality is complex; function is made possible through a balance of physical and psychological health. Previous research has

Financial Support: None.

documented the impact of medical comorbidities such as diabetes [1,2], coronary artery disease, and other medical conditions [3–5] on sexual function. In contrast to investigation of these associations between medical conditions and sexual function, less attention has been focused on the role of personality or coping.

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Sex Med 2013;1:69-75

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Personality is a psychological concept, or construct, that constitutes the unique combination of characteristics individuals possess, which typically influence their thoughts, motivations, and behaviors in a variety of circumstances [6]. Personality research generally revolves around various numbers of traits, which are presumed to be stable over time, and which derive from some combination of genetic predisposition and environmental stimulus [7,8]. Indeed, personality is thought to develop and mature during adolescence with research showing stability in adulthood [8,9].

Several models exist for interpreting personality. The five-factor model is widely accepted and utilized for assessment [10,11]. According to this model, personality is divided into five broad domains or dimensions. These include extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Previous studies evaluating personality and sexual function have suggested certain personality traits are associated with sexual symptoms; domains of extraversion and openness to new experience have been linked with better orgasmic capacity and vaginal eroticism [12,13]. However, the scope of these reports is limited, and we lack an understanding regarding the impact of personality on other domains of sexual function.

Coping is the process of implementing a response to a stressful situation or event [14]. Depending on the type of stress being experienced, or indeed, the type of individual experiencing stress, different levels of effort may be invoked in ameliorating the stress [15]. Coping can range from actively trying to regulate the situation (i.e., problem- or task-focused coping) to changing one's appraisal of the situation (emotion-focused coping) to avoiding the situation altogether (avoidance coping). Each of these ways of coping constitutes a coping mechanism, or strategy.

Coping strategies can be unconscious efforts or learned behaviors. The impact of each strategy on the individual establishes it as either positive or negative. Certain medical conditions, such as painful bladder syndrome, have shown associations with poor coping in preliminary studies [16]. Despite this, a relationship between sexual function and a patient's utilization of coping mechanisms has not been established.

Hence, this study sought to describe personality traits of a group of women presenting for treatment of female sexual dysfunction (FSD) while concurrently evaluating their most commonly used coping strategies. Additionally, the relationship between personality and coping with sexual dysfunction scores was explored. It was hypothesized that women with sexual dysfunction would exhibit tendencies toward introversion and emotional instability and would be less likely to employ positive coping strategies. Because of the exploratory nature of this study, all relationships between personality, coping, and sexual function were investigated. As subjects were seeking treatment for FSD, a secondary aim was to document any change in patients' sexual function over the period of time following initial assessment.

Material and Methods

This was an institutional review board-approved cross-sectional study of women presenting for treatment of female sexual disorders between January 2009 and January 2010. Subjects were patients of an academic referral center. Candidates for study were identified using the International Classification of Diseases, Ninth Revision (ICD-9) codes most commonly used by this practice for women presenting with sexual concerns. These included dyspareunia, vulvar vestibulitis, vulvodynia, psychosexual dysfunction, menopausal symptoms, and unspecified symptoms associated with female genital organs.

Eligible charts were manually screened to ensure FSD was the chief complaint. Patients were included if they were aged 18 years or older, English speaking, and completed their first office assessment a minimum of 6 months prior to enrollment. Subjects were not excluded because of psychological diagnosis or current prescription medications. Seventy-nine patients were identified as meeting inclusion criteria. All subjects were mailed an informed consent statement and study packet including the following questionnaires: Female Sexual Function Index (FSFI), Female Sexual Distress Scale-Revised (FSDS-R), Ten Item Personality Index (TIPI), and Brief COPE. A cover letter explaining the study and a postagepaid return envelope were included in the package. Those who did not respond received a second mailing 4 weeks later. A baseline FSFI from their first office visit and demographic information were obtained from the medical chart.

Main Outcome Measures

The FSFI is a valid and reliable questionnaire used to screen subjects for sexual disorders [17,18]. Six domains are assessed with a maximum overall

score of 36 and can also be scored individually. Subjects with overall scores ≤26.55 are considered at risk for sexual dysfunction. The FSDS and its successor, the FSDS-R, were developed to assess women's personal distress related to sexual dysfunction [19,20]. The revised version contains the 12 questions of its predecessor, plus a 13th item asking the degree to which low sexual desire is bothersome, demonstration of which is required for a clinical diagnosis of hypoactive sexual desire disorder. Both versions have demonstrated good reliability and validity. Furthermore, using a cut score of ≥20, it demonstrated sensitivity of 84%, specificity, 100%, and positive predictive value, 100% [19]. The FSDS-R scores range from 0 to 52, with higher scores denoting higher levels of distress.

Personality dimensions were assessed using the TIPI. This validated 10-item questionnaire uses the five-factor model to classify personality into five domains: extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience [21–23]. Extraversion is characterized as outgoing or energetic with tendencies toward positive emotions. Agreeableness is typically seen as friendly, compassionate, and cooperative. This trait is often found in those who value getting along with others even if it means compromising their own interests. Conscientiousness can be summarized as efficient, organized, selfdisciplined, and the ability to plan. Those scoring higher in this domain tend to prefer planned rather than spontaneous behavior. Emotional stability is described as secure and confident. Low scores would represent emotional instability, also known as neuroticism. Those with high emotional stability scores are less emotionally reactive and tend to be calm in stressful situations. Openness to experience is characterized by inventiveness, curiosity, an appreciation for art, emotion, or unusual ideas. Subjects with low scores in openness to experience tend to have conventional, traditional interests. The TIPI uses 10 questions scored on a Likert-type scale to show how strongly each subject displays specific personality characteristics. Higher scores indicate a greater degree of that trait.

The TIPI validation study used a sample of 1,813 participants who completed it, plus a number of other instruments [23]. Convergent validity was established by comparison with the Big Five Inventory (BFI) [24,25]. Correlations were as follows: extraversion, 0.87; agreeableness, 0.70; conscientiousness, 0.75; emotional stability,

0.81; and openness to experience, 0.65. All were significant at the P < 0.01 level. Discriminant validity for each TIPI dimension with respect to its other four dimensions was demonstrated in that all correlations were ≤0.36; this was comparable to discriminant correlations for the BFI, which were ≤0.31. Test–retest reliability was assessed using a subset of 180 participants, who completed the TIPI again 6 weeks later. Correlations were as follows: extraversion, 0.77; agreeableness, 0.71; conscientiousness, 0.76; emotional stability, 0.70; and openness to experience, 0.62. Gosling et al. also compared the TIPI to a number of other measures and determined that the TIPI would be an acceptable measure of five-factor model personality dimensions.

The Brief COPE is a 28-item, shortened version of the COPE Inventory [26,27]. In the Brief COPE, patients are asked to rate the frequency with which they used each of the 28 methods for managing stressful events within the last 3 months. Questions are answered using a Likert-type scale with each coping technique represented by two items, yielding 14 coping strategies: active coping, planning, positive reframing, acceptance, humor, religion, use of emotional support, use of instrumental support, self-distraction, denial, venting, substance use, behavioral disengagement, and self-blame.

The original COPE underwent rigorous reliability and validity testing following empirical item creation and scale construction. The final 53-item instrument consisted of 13 scales with 4 items each, plus one 1-item scale. Adequate internal consistency was demonstrated, and test-retest reliability was established through use of two samples, tested after a 6- (N = 116) or 8- (N = 89)week interval. Pearson correlation coefficients ranged from r = 0.42-0.89 and r = 0.46-0.86, respectively. While these characteristics made the COPE very desirable, the full scale was deemed too long an instrument for the current study; thus the Brief COPE was used because of its ability to decrease the amount of participant response time without sacrificing psychometric properties [26].

Statistical evaluation was performed using IBM SPSS Statistics version 19 (SPSS Inc., an IBM Company, Chicago, IL, USA). Descriptive statistics were calculated for all dependent variables. Correlations for questionnaire data were calculated using Pearson's correlation coefficient. Baseline FSFI was compared with the study packet FSFI using paired *t*-test. Only completed packets were included in the final analysis.

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Table 1 Demographics

	Mean (SD)
Age, N = 49	39.7 (12.71)
BMI, N = 45	26.5 (6.10)
Race, $N = 51$	% (Frequency)
Caucasian	45.1 (23)
Hispanic	2.0 (1)
Other	2.0 (1)
Unreported	51.0 (26)
Marital status, N = 48	
Single	8.3 (4)
Married/living with partner	87.5 (42)
Separated/divorced	4.2 (2)
Menopausal status, N = 47	
Premenopausal	61.7 (29)
Postmenopausal (no HT)	27.7 (13)
Postmenopausal (vaginal estrogen only)	4.3 (2)
Postmenopausal (oral HT)	6.4 (3)
Smoking status, N = 37	
No	75.9 (28)
Previous	16.2 (6)
Current	8.1 (3)
Psychological diagnoses	
Depression, N = 20	90.0 (2)
Anxiety, $N = 14$	71.4 (10)

BMI = body mass index; HT = hormone therapy; SD = standard deviation

Results

Fifty completed survey packets were returned, yielding a response rate of 63.2% (50/79). The mean age was 40 years (standard deviation [SD] 14) with a mean body mass index of 26 (SD 5.7). The majority were married or living with a partner (82.1%) and were premenopausal (64.9%). While over 90% were nonsmokers, nearly three-fourths consumed alcohol (Table 1). Mean TIPI scores for the sample were in the normative range for the female gender [23]. This clinical sample displayed strong traits of conscientiousness and agreeableness (Table 2).

With respect to the COPE, positive strategies with the highest mean scores included planning and active coping; negative coping mechanisms with the highest mean scores were self-blame, self-distraction, and venting (Table 2). Subjects rarely utilized denial, possibly reflected by the fact that these women were actively seeking treatment. Although a large portion of the sample consumed at least one alcoholic drink monthly, substance use was a rarely used coping strategy.

The mean total FSFI score at the time of initial office visit was 16.57 (SD 5.60). The study packet FSFI score was 20.39 (SD 5.85) with 86% of the sample having a total FSFI score <26.55. While all domains of the FSFI were found to have poor scores, the lowest were seen in the domain of desire (Table 2). The initial office visit score and study

packet score were then compared to elicit objective improvements in sexual function following treatment. Study packet FSFI scores showed improvement for the domains of desire (P = 0.003), arousal (P < 0.001), orgasm (P < 0.001), satisfaction (P = 0.034), pain (P = 0.037), and total scores (P < 0.001) (Table 3).

Distress regarding sexual function was explored using the FSDS-R. The mean score was 35.53 (SD 10.66) suggesting subjects experienced high distress related to their sexual function, possibly prompting the subject to seek care.

Associations between personality and sexual function, using the FSFI and FSDS-R, were explored. While no statistically significant findings were noted, likely because of the small sample size, there are several noteworthy trends. Extraversion

Table 2 Mean scores for TIPI, Brief COPE, baseline FSFI, study packet FSFI, and FSDS-R

Measure	N	Mean (SD)
TIPI		
Extraversion	49	4.77 (1.54)
Agreeableness	49	5.39 (1.05)
Conscientiousness	49	5.76 (1.23)
Emotional stability	49	4.25 (1.47)
Openness to experience	49	5.17 (1.08)
Brief COPE		,
Active coping	48	5.24 (1.59)
Planning	48	5.29 (1.53)
Positive reframing	48	4.06 (1.67)
Acceptance	48	5.79 (1.58)
Humor	48	3.85 (1.98)
Religion	48	4.33 (2.28)
Emotional support	48	4.71 (1.89)
Instrumental support	48	4.50 (1.94)
Self-distraction	47	4.91 (1.61)
Denial	48	2.48 (0.90)
Venting	47	4.06 (1.42)
Substance use	48	2.21 (0.71)
Behavioral disengagement	47	3.13 (1.34)
Self-blame	48	4.48 (1.86)
Baseline FSFI		0.00 (4.40)
Desire	45	2.00 (1.10)
Arousal	39	2.50 (1.28)
Lubrication	37	3.01 (1.60)
Orgasm	37	2.60 (1.63)
Satisfaction Pain	35 31	2.63 (1.14)
Total	29	3.65 (1.73) 15.79 (5.59)
Study packet FSFI	29	15.79 (5.59)
Desire	49	2.47 (1.16)
Arousal	44	3.26 (1.33)
Lubrication	43	3.40 (1.64)
Orgasm	44	3.46 (1.69)
Satisfaction	44	3.05 (1.44)
Pain	41	4.12 (1.68)
Total	39	20.39 (5.86)
FSDS-R	00	20.00 (0.00)
Total	47	35.53 (10.66)

FSDS-R = Female Sexual Distress Scale-Revised; FSFI = Female Sexual Function Index; SD = standard deviation; TIPI = Ten Item Personality Index

Table 3 Baseline FSFI compared with study packet FSFI (N = 50)

	Mean difference (SD)	P value
FSFI domains		
Desire	-0.42 (0.88)	0.003*
Arousal	-0.84 (1.19)	< 0.001*
Lubrication	-0.49 (1.46)	0.065
Orgasm	-1.00 (1.28)	< 0.001*
Satisfaction	-0.46 (1.16)	0.034*
Pain	-0.56 (1.39)	0.037*
Total	-4.19 (4.97)	<0.001*

Data analyzed using paired t-test of difference scores.

*P < 0.05.

FSFI = Female Sexual Function Index; SD = standard deviation

and total FSFI score approached significance (r = 0.285, P = 0.079), implying that extraverted subjects were more likely to have better function. Interestingly, the FSFI domain of pain was positively associated with emotional stability (r = 0.278, P = 0.083), suggesting that subjects with more emotional stability experienced less pain. However, the converse was seen with agreeableness; in this case, a negative correlation was noted (r = -0.298, P = 0.058). This supports the potential for more agreeable subjects to have higher levels of pain and emphasizes the complexity of pain symptoms overall. While these findings are not significant, we believe they are relevant to our clinical population and prompt larger studies in this area.

Regarding the FSDS-R, greater openness to experience did show significant correlation (r = -0.305, P = 0.037) with less sexually related distress. Interpreting this correlation, those with

more distress demonstrate a lower level of being open to new experiences. A similar relationship was also noted with the domain of extraversion (r = -0.258, P = 0.080).

Next, coping mechanisms and sexual function using the FSFI were assessed. Significant relationships were found. Subjects using emotional support showed better orgasm (r = 0.303, P = 0.048) and satisfaction (r = 0.331, P = 0.030). Emotional support, traditionally evaluated as a positive coping strategy, was employed more often in subjects with better orgasm and higher satisfaction. The utilization of religion as a coping strategy approached significance with better desire (r = 0.253, P = 0.083). No other significant correlations were documented.

Subsequently, coping mechanisms were evaluated relative to the FSDS-R. Trends were noted with behavioral disengagement (r = 0.285, P = 0.057) and self-blame (r = 0.261, P = 0.080), supporting that use of these negative mechanisms was related to higher levels of distress. In contrast, the positive strategy of instrumental support was negatively associated (r = -0.267, P = 0.073), suggesting that this coping skill may lessen perceived distress because of sexual dysfunction. These findings suggest that there may be a relationship between coping and distress regarding sexual function; further studies are needed to investigate this association.

Lastly, correlations of TIPI and COPE scores were performed, establishing several important findings (Table 4). Those exhibiting extraverted personalities used positive coping mechanisms,

Table 4 Correlations between TIPI and Brief COPE

	Ten Item Personality Inventory (TIPI)				
	Extraversion	Agreeableness	Conscientiousness	Emotional stability	Openness to experience
Brief COPE domains					
Active coping (r, P)	-0.016, 0.914	0.144, 0.327	0.329, 0.023*	0.227, 0.125	0.187, 0.204
Planning (r, P)	-0.021, 0.885	0.268, 0.065	0.306, 0.034*	0.259, 0.079	0.291, 0.045*
Positive reframing (r, P)	0.067, 0.652	0.004, 0.980	0.049, 0.739	-0.041, 0.785	0.071, 0.634
Acceptance (r, P)	-0.043, 0.774	0.126, 0.393	0.010, 0.948	0.105, 0.484	0.242, 0.097
Humor (r, P)	0.204, 0.164	0.038, 0.797	-0.177, 0.228	-0.182, 0.221	0.006, 0.966
Religion (r, P)	-0.112, 0.448	0.050, 0.737	0.115, 0.438	-0.085, 0.570	0.008, 0.958
Emotional support (r, P)	0.310, 0.032*	0.075, 0.614	-0.024, 0.871	-0.083, 0.577	0.192, 0.192
Instrumental support (r, P)	0.357, 0.013*	0.098, 0.506	0.198, 0.177	0.030, 0.844	0.292, 0.044*
Self-distraction (r, P)	-0.435, 0.005*	0.129, 0.389	0.095, 0.525	-0.176, 0.243	0.098, 0.512
Denial (r, P)	-0.134, 0.365	0.087, 0.557	-0.039, 0.795	-0.006, 0.966	0.115, 0.436
Venting (r, P)	-0.148, 0.321	0.090, 0.548	0.238, 0.107	-0.064, 0.673	0.077, 0.609
Substance use (r, P)	-0.041, 0.781	-0.027, 0.856	-0.179, 0.224	-0.126, 0.398	0.120, 0.415
Behavioral disengagement (r, P)	-0.065, 0.665	-0.002, 0.990	-0.064, 0.671	-0.229, 0.125	-0.031, 0.838
Self-blame (r, P)	-0.325, 0.024*	0.172, 0.244	0.018, 0.901	-0.228, 0.123	-0.092, 0.535

^{*}P < 0.05.

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such as emotional support and instrumental support, more often than negative coping strategies like self-distraction or self-blame. As is consistent with conscientiousness, these subjects used active planning more frequently. These relationships support the premise that personality influences these adaptive behaviors.

Discussion

Our study, investigating a portion of the psychological aspects of sexual dysfunction, was able to demonstrate relationships between personality, coping, and sexual function complaints. In our patient population, those subjects exhibiting tendencies toward introversion and agreeableness had worse sexual function, and those who were more introverted and less open to new experiences had more distress regarding their complaints. Additionally, those with poor sexual function more often utilized poor coping strategies, whereas those with better sexual function were more likely to employ positive mechanisms. While statistical trends, rather than significant findings, were seen for some factors, our findings in this clinical sample should prompt further investigation. A large multicenter study could help determine potential relationships for the general population.

While few studies have explored these relationships, our findings are similar to that which exists in the literature. Harris et al. described associations between the personality dimensions of introversion, not being open to new experiences, and emotional instability with coital orgasmic infrequency. Their sample, taken from the TwinsUK registry, was large and had a good response rate of 48% [12]. Burri et al. also utilized the TwinsUK registry for investigation of self-reporting of a G-spot and its association with personality. Women scoring higher in the personality domains of extraversion and openness to new experiences were more likely to report having a G-spot [13]. These two studies show similarities with respect to specific personality dimensions and sexual function. However, they do not directly assess the relationship between personality and sexual function in a clinical cohort. Because findings from a clinical group more directly impact treatment choice, such information is important to providers. Additionally, previous work did not explore all parameters of sexual function. Our study is able to confirm prior findings, as well as add information regarding all domains of sexual function in a group of women presenting for sexual disorders.

Survey studies incur an inherent response bias, which is a potential limitation of these data. However, because the request for participation was from the specialist whom they consulted for diagnosis and management of their disorder, we believe the bias would be lessened. Although our sample size was limited, it represents a large number being treated by one physician, and a good response rate was achieved. Nevertheless, we recognize that our ability to document strong associations was hampered by the size of our group. This was an exploratory study evaluating various relationships, and as correlation analyses are unconstrained by multiple testing, we believe our findings are worthy of consideration. Additional strengths of this study include use of several validated questionnaires and the exploration of a topic that has not been well characterized. Further research between sexual function, personality, and coping mechanisms in the general public will be important in delineating these relationships more fully.

Conclusion

Women with strong tendencies toward introversion may be at a greater risk for sexual dysfunction. Those utilizing negative coping strategies are more likely to have higher distress in regard to their sexual dysfunction. These findings add information to the body of knowledge regarding the complex psychological elements that contribute to female sexuality.

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Conflict of Interest: The author(s) report no conflicts of interest.

References

- 1 Erol B, Tefekli A, Ozbey I, Salman F, Dincag N, Kadioglu A, Tellaloglu S. Sexual dysfunction in type II diabetic females: A comparative study. J Sex Marital Ther 2002;28(suppl 1):55– 62.
- 2 Erol B, Tefekli A, Sanli O, Ziylan O, Armagan A, Kendirci M, Eryasar D, Kadioglu A. Does sexual dysfunction correlate with deterioration of somatic sensory system in diabetic women? Int J Impot Res 2003;15:198–202.
- 3 Basson R. Female sexual dysfunction in hypopituitarism. Lancet 2007;370:737; authors' reply 737.
- 4 Basson R. Sexuality in chronic illness: No longer ignored. Lancet 2007;369:350–2.
- 5 Basson R, Schultz WW. Sexual sequelae of general medical disorders. Lancet 2007;369:409–24.

- 6 Ryckman RM. Theories of personality. 7th edition. Belmont, CA: Wadsworth/Thomson Learning; 2000:689 pp.
- 7 Matthews G, Deary IJ, Whiteman MC. Personality traits. 2nd edition. Cambridge, UK: Cambridge University Press; 2004:518 pp.
- 8 Srivastava S, John OP, Gosling SD, Potter J. Development of personality in early and middle adulthood: Set like plaster or persistent change? J Pers Soc Psychol 2003;84:1041–53.
- 9 McCrae RR, Costa PT. Personality in adulthood: A Five-Factor theory perspective. 2nd edition. New York: Guilford Press; 2002:268 pp.
- 10 Rector NA, Begby RM, Huta V, Ayearst LE. Examination of the trait facets of the five-factor model in discriminating specific mood and anxiety disorders. Psychiatry Res 2012;199: 131–9.
- 11 Mullins-Sweatt SN, Lengel GJ. Clinical utility of the Five-Factor Model of personality. J Pers 2012;80:1615–39.
- 12 Harris JM, Cherkas LF, Kato BS, Heiman JR, Spector TD. Normal variations in personality are associated with coital orgasmic infrequency in heterosexual women: A populationbased study. J Sex Med 2008;5:1177–83.
- 13 Burri AV, Cherkas L, Spector TD. Genetic and environmental influences on self-reported G-spots in women: A twin study. J Sex Med 2010;7:1842–52.
- 14 Lazarus RS, Folkman S. Stress, appraisal and coping. New York: Springer; 1984:456 pp.
- 15 Matthews G, Davies DR, Westerman SJ, Stammers RB. Human performance: Cognition, stress and individual differences. Philadelphia, PA: Taylor & Francis Group; 2000:416 pp.
- 16 Rothrock NE, Lutgendorf SK, Kreder KJ. Coping strategies in patients with interstitial cystitis: Relationships with quality of life and depression. J Urol 2003;169:233–6.
- 17 Wiegel M, Meston C, Rosen R. The female sexual function index (FSFI): Cross-validation and development of clinical cutoff scores. J Sex Marital Ther 2005;31:1–20.

- 18 Rosen R, Brown C, Heiman J, Leiblum S, Meston C, Shabsigh R, Ferguson D, D'Agostino R, Jr. The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. J Sex Marital Ther 2000;26:191–208.
- 19 Derogatis LR, Rosen R, Leiblum S, Burnett A, Heiman J. The Female Sexual Distress Scale (FSDS): Initial validation of a standardized scale for assessment of sexually related personal distress in women. J Sex Marital Ther 2002;28:317–30.
- 20 Derogatis L, Clayton A, Lewis-D'Agostino D, Wunderlich G, Fu Y. Validation of the female sexual distress scale-revised for assessing distress in women with hypoactive sexual desire disorder. J Sex Med 2008;5:357–64.
- 21 Digman JM. Five robust trait dimensions: Development, stability, and utility. J Pers 1989;57:195–214.
- 22 Saulsman LM, Page AC. The five-factor model and personality disorder empirical literature: A meta-analytic review. Clin Psychol Rev 2004;23:1055–85.
- 23 Gosling SD, Rentfrow PJ, Swann WB, Jr. A very brief measure of the Big-Five personality domains. J Res Pers 2003;37:504– 28.
- 24 John OP, Srivastava S. The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In: Pervin LA, John OP, eds. Handbook of personality: Theory and research. New York: Guilford; 1999:102–38.
- 25 Benet-Martinez V, John OP. "Los Cinco Grandes" across cultures and ethnic groups: Multitrait multimethod analyses of the Big Five in Spanish and English. J Pers Soc Psychol 1998;75:729–50.
- 26 Carver CS. You want to measure coping but your protocol's too long: Consider the brief COPE. Int J Behav Med 1997;4:92–100.
- 27 Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: A theoretically based approach. J Pers Soc Psychol 1989;56:267–83.