

## The Brief Index of Sexual Functioning for Women (BISF-W): a new scoring algorithm and comparison of normative and surgically menopausal populations

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### ABSTRACT

**Objective:** To develop a new scoring algorithm for the Brief Index of Sexual Functioning for Women (BISF-W) and to compare results from a normative population with those from a clinical sample of surgically menopausal women with impaired sexual function.

**Design:** The scoring algorithm provided an overall composite score and seven dimension scores: D1 (thoughts/desires), D2 (arousal), D3 (frequency of sexual activity), D4 (receptivity/initiation), D5 (pleasure/orgasm), D6 (relationship satisfaction), and D7 (problems affecting sexual function). The normative population consisted of 225 healthy women between the ages of 20 and 55 years; 187 had regular sexual partners and 38 did not. The clinical sample comprised 104 women in the same age range (with partners), who reported that their sex lives had become less active or less satisfying after surgery (bilateral oophorectomy and hysterectomy), despite standard estrogen replacement therapy.

**Results:** The BISF-W composite and dimension scores for healthy women with partners were significantly greater ( $p < 0.001$ ) than for women without partners, except for D1, which was comparable in both groups. For healthy women with partners, the composite and dimension scores (D1, D3, and D5) decreased significantly with increasing age ( $p < 0.05$ ). In comparison, surgically menopausal women had significantly lower composite and dimension scores ( $p < 0.001$ ), with the exception of D7, which was significantly higher (more problems). As a percent of the normative means for healthy women with partners, the dimension scores for surgically menopausal women were lowest for D1—47.2%, D3—46.9%, and D5—46.1%.

**Conclusions:** This research provides further validation of the BISF-W as an instrument for evaluating female sexual function and quantifies the nature and degree of impaired sexual function in surgically menopausal women. (*Menopause* 2000;7:350–363. © 2000, The North American Menopause Society.)

**Key Words:** Surgical menopause – Oophorectomy – Sexual function – BISF-W.

**T**he Brief Index of Sexual Functioning for Women (BISF-W) is a 22-item self-report instrument for assessing female sexual function that was specifically developed for use in clinical trials.<sup>1</sup> Although patterned after the Brief Sex-

ual Functioning Questionnaire for men (BSFQ),<sup>2</sup> the BISF-W differs from the male questionnaire on items relating to sexual desire, arousal, orgasm, sexual activities, body image, and physical problems affecting sexual function in women.

The BISF-W was originally used, in a descriptive fashion, to characterize the sexual functioning of 329 healthy women enrolled in a Women's Wellness Center.<sup>3</sup> In addition, the psychometric properties of the instrument were also validated in that population<sup>1</sup> using a scoring algorithm that was based on a three-factor analysis of the item response codes. From this analysis the test-retest reliability of the questionnaire was found to be satisfactory, and

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concurrent validity was demonstrated with the Derogatis Sexual Function Inventory, a 261-item questionnaire.<sup>4</sup>

In further refining the BISF-W for use in a clinical trial of surgically menopausal women with impaired sexual function, a new quantitative scoring algorithm was developed. In contrast to the previous factor analysis, the new algorithm was designed from a conceptual basis to provide an overall composite score for sexual function, as well as seven dimension scores for each of the important aspects of female sexuality and response addressed by the questionnaire. These included D1 (thoughts/desire), D2 (arousal), D3 (frequency of sexual activity), D4 (receptivity/initiation), D5 (pleasure/orgasm), D6 (relationship satisfaction), and D7 (problems affecting sexual function).

In this article we describe the development and initial validation of the new BISF-W scoring algorithm. A re-analysis of the previously obtained BISF-W data from healthy women<sup>3</sup> (restricted to subjects between 20 and 55 years of age—the same age range of the surgically menopausal women in the clinical trial) using the new scoring algorithm is presented with normative statistics for the composite and dimension scores. The influence of having a current sexual partner on the BISF-W scores is also examined in this database, as well as the effect of age on sexual function in the subset of women with partners. Lastly, we use the BISF-W and new scoring algorithm to evaluate a sample of 104 surgically menopausal women with complaints of impaired sexual function, and we compare their scores to the normative data derived from the earlier study in healthy women.<sup>3</sup>

## METHODS

### New scoring algorithm for the BISF-W

For ease of reference the complete BISF-W questionnaire is given in "Appendix 1." It is essentially identical to the original instrument<sup>1</sup> except for minor wording changes in questions 4, 5, 7, and 11 where "kissing" is now referred to as "erotic kissing" and "oral sex" is now referred to as "oral sex (giving and receiving)." The scoring algorithm for each question, the possible score range,

and the dimension (D1 to D7) to which each question contributes are described in "Appendix 2." For multiple-item questions (such as questions 4, 5, 7, 11, 14, and 15), the scores of each item were added together and the sum divided by an appropriate integer. The re-scaling of these sums was performed to approximately balance the numerical contribution of each question to its corresponding dimension as well as to balance the contribution of the individual dimensions to the overall composite score.

The seven dimensions, their corresponding questions, and possible score ranges are given in Table 1. The composite score is computed from the dimension scores by the following formula:

Composite Score =

$$D1 + D2 + D3 + D4 + D5 + D6 - D7.$$

The score for D7 (problems affecting sexual function) is subtracted in the formula so that a higher composite score represents greater sexual function. The possible range of composite scores is -16 to +75. Scoring of the individual questions and calculation of the dimension and composite scores were performed on a Microsoft Excel Worksheet.

### Normative sample: re-analysis of the database in healthy women

An electronic database containing BISF-W and demographic data from the previous study of 329 healthy women<sup>3</sup> was re-analyzed with the new scoring algorithm to compute the individual dimension and composite scores for the subpopulation of all subjects between the ages of 20 and 55 with complete BISF-W data ( $n = 225$ ). The demographic characteristics of this subpopulation (including race, religion, marital status, educational level, employment status, overall health status, and sexual orientation) were similar to those reported previously.<sup>3</sup> In contrast, the mean age of the subpopulation was younger (40.4 years), a greater proportion was pre- or perimenopausal (83.1%), and a smaller proportion was postmenopausal (16.9%). Based on their responses to BISF-W question 1 (presence of a sexual partner), 187 of these subjects had current

TABLE 1. BISF-W dimensions, their corresponding questions, and possible score ranges

Dimension (name)	Questions from BISF-W	Possible score range
D1 (Thoughts/Desire)	Q3 + Q4	0 to 12
D2 (Arousal)	Q5 + Q6	0 to 12
D3 (Frequency of Sexual Activity)	Q7	0 to 12
D4 (Receptivity/Initiation)	Q8 + Q9 + Q12	0 to 15
D5 (Pleasure/Orgasm)	Q10 + Q11	0 to 12
D6 (Relationship Satisfaction)	Q18 + Q19 + Q20	0 to 12
D7 (Problems Affecting Sexual Function)	Q14 + Q15 + Q16 + Q17	0 to 16

sexual partners and 38 subjects did not. Among subjects with partners, 71.1% were married and/or living together with a partner. The mean age and menopausal status of the subsets of women with and without sexual partners were similar. It is important to note that although the subjects in this population were considered in good health, there was no attempt to exclude any subject based on her sexual history.<sup>1,3</sup>

#### **Clinical sample: surgically menopausal women with impaired sexual function**

The patient population reported here comprised 104 surgically menopausal women with complaints of impaired sexual function, who were screened using the BISF-W for eligibility in a clinical trial of an experimental transdermal testosterone delivery system.<sup>5</sup> All screened patients were between 20 and 55 years (mean age 47.1 years), had undergone a bilateral oophorectomy and total hysterectomy 1–10 years before screening, had been receiving oral conjugated equine estrogens (at a dose of 0.625 mg or greater) for at least 2 months, and were in a stable monogamous heterosexual relationship for at least 1 year. In addition, to be eligible for screening each of the patients had affirmed, before taking the BISF-W, that (i) (at some time) before surgery her sex life was “active and satisfying,” (ii) since surgery her sex life had become “less active or less satisfying,” and (iii) she would prefer her sex life to be “more active and satisfying” than it presently is. Patients who had used oral, topical, or vaginal androgens during the prior 3 months or injectable androgens during the prior 6 months, who had hypertension, diabetes, a chronic illness, or an ongoing psychiatric disturbance, were excluded from screening. It should be noted that the 104 patients included here represent all screened subjects who were administered the BISF-W, including those who did not qualify for the clinical trial.

#### **Statistical analysis**

Descriptive statistics of the dimension and composite scores (mean, SEM, SD, median, minimum, maximum) were computed for all healthy women, the subsets with and without sexual partners, and the screened surgically menopausal patients. Comparisons between the subsets of healthy women with and without partners, and between the healthy women with partners and the surgically menopausal patients were performed by *t* tests. In the subset of healthy women with partners, linear regression analysis was performed between the subjects' age and the BISF-W parameters. Statistical significance was attributed to *p* values (two-sided) <0.05. Cronbach's alpha coefficients<sup>6</sup> were computed for those

BISF-W dimensions that were based on multiple questions (e.g., D1, D2, D4, D5, D6, and D7), using data from the screened patient population.

## **RESULTS**

### **BISF-W dimension and composite scores in healthy women**

*Influence of Partner.* Descriptive and inferential statistics for the BISF-W dimension and composite scores in all healthy women and in the subsets of women with regular partners and without regular partners are listed in Table 2. The mean dimension scores for the former were significantly greater ( $p < 0.001$ ) than the latter, with the exception of D1 (thoughts/desire), which was comparable in the two subsets (Fig. 1). As expected, the mean composite score was also significantly greater for women with partners ( $33.60 \pm 0.91$ , SEM) than for women without partners ( $11.01 \pm 1.83$ ) ( $p < 0.001$ ).

*Effect of Age in Subjects with Partners.* The dimensions D1 (thoughts/desire), D3 (frequency of sexual activity), D5 (pleasure/orgasm), and the composite score all decreased significantly with increasing age in the subset of healthy women with partners ( $p < 0.05$ ); the other dimension scores were not significantly correlated with age. A scatter plot of the D3 scores, which showed the strongest effect of age ( $r = -0.269$ ;  $p = 0.002$ ), is shown in Fig. 2. Although there is considerable variation in the data, the regression line decreased by approximately 33% over the age range from 20 to 55 years.

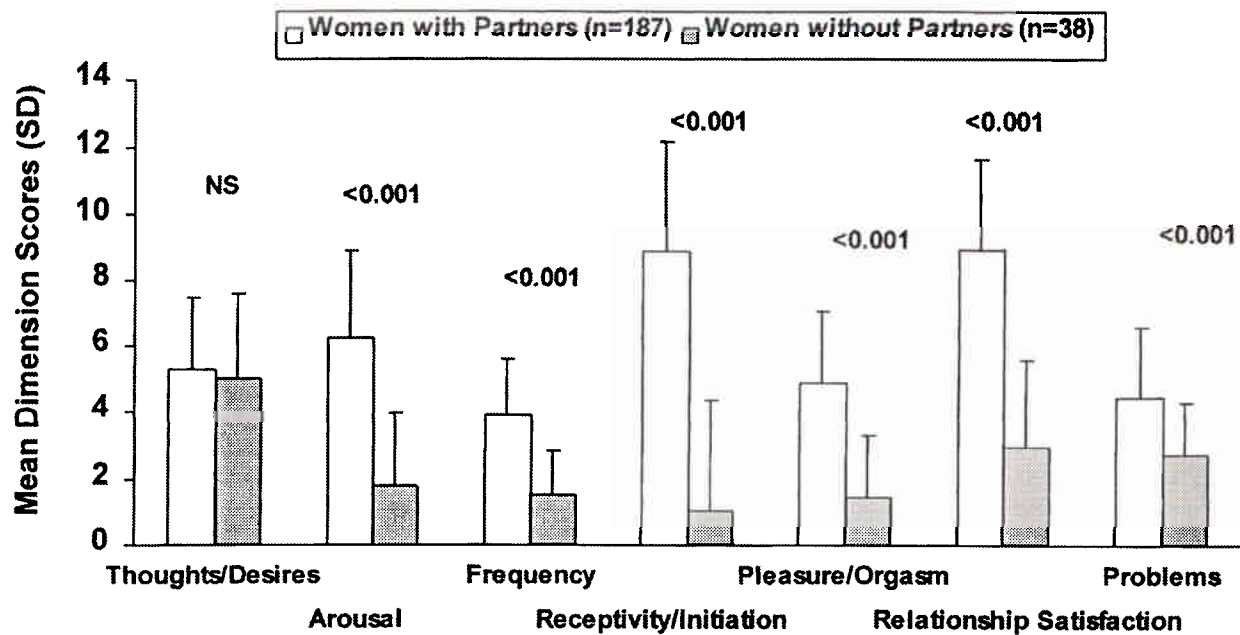
### **BISF-W dimension and composite scores in surgically menopausal women with impaired sexual function**

Descriptive statistics of the BISF-W dimension and composite scores in 104 surgically menopausal women with partners are given in Table 3. In comparison to the normative means for the healthy women with partners, the mean dimension scores in the group of surgically menopausal women were significantly lower ( $p < 0.001$ ) for all dimensions with the exception of D7 (problems affecting sexual function), which were significantly higher (more problems) in the clinical sample (Fig. 3). Expressed as a percentage of the normative means for healthy women with partners, the mean dimension scores for surgically menopausal women (Table 3) were lowest for D1 (thoughts/desire; 47.2%), D3 (frequency of sexual activity; 46.9%), and D5 (pleasure/orgasm; 46.1%). Likewise the mean BISF-W composite score was significantly lower in the surgically menopausal women ( $p < 0.001$ ), corresponding to 54.6% of the normative mean for the healthy women with partners. It is

**TABLE 2.** Descriptive statistics (mean  $\pm$  SEM, SD, median, and range) for BISF-W dimension and composite scores in all healthy women and in the subsets of women with regular partners and without regular partners

Dimension	Descriptive statistics	All subjects (n = 225)	With partners (n = 187)	Without partners (n = 38)	t statistic (p value)
D1 Thoughts/Desire	Mean $\pm$ SEM	5.26 $\pm$ 0.15	5.31 $\pm$ 0.16	5.01 $\pm$ 0.42	0.755
	SD	2.23	2.16	2.57	(NS)
	Median	5.29	5.29	4.50	
	Range	0.29 to 11.29	0.29 to 11.29	0.57 to 9.71	
D2 Arousal	Mean $\pm$ SEM	5.46 $\pm$ 0.21	6.21 $\pm$ 0.20	1.76 $\pm$ 0.36	9.595
	SD	3.09	2.68	2.20	(<0.001)
	Median	6.00	6.75	1.13	
	Range	0 to 12	0 to 12	0 to 9	
D3 Frequency of Sexual Activity	Mean $\pm$ SEM	3.49 $\pm$ 0.12	3.90 $\pm$ 0.12	1.49 $\pm$ 0.22	8.216
	SD	1.87	1.70	1.36	(<0.001)
	Median	3.50	4.00	1.25	
	Range	0 to 8.75	0 to 8.75	0 to 7	
D4 Receptivity/Initiation	Mean $\pm$ SEM	7.53 $\pm$ 0.30	8.85 $\pm$ 0.24	1.05 $\pm$ 0.54	13.170
	SD	4.43	3.33	3.32	(<0.001)
	Median	9.00	10.00	0.00	
	Range	0 to 15	0 to 15	0 to 13	
D5 Pleasure/Orgasm	Mean $\pm$ SEM	4.33 $\pm$ 0.16	4.91 $\pm$ 0.16	1.47 $\pm$ 0.30	9.136
	SD	2.47	2.16	1.88	(<0.001)
	Median	4.75	5.00	1.00	
	Range	0 to 10	0 to 10	0 to 7.25	
D6 Relationship Satisfaction	Mean $\pm$ SEM	7.90 $\pm$ 0.24	8.90 $\pm$ 0.20	2.97 $\pm$ 0.43	12.043
	SD	3.54	2.79	2.65	(<0.001)
	Median	9.00	9.00	3.00	
	Range	0 to 12	0 to 12	0 to 12	
D7 Problems Affecting Sexual Function	Mean $\pm$ SEM	4.18 $\pm$ 0.14	4.47 $\pm$ 0.15	2.75 $\pm$ 0.26	4.778
	SD	2.12	2.10	1.58	(<0.001)
	Median	4.35	4.58	3.00	
	Range	0 to 10.3	0 to 10.3	0 to 8	
Composite score	Mean $\pm$ SEM	29.79 $\pm$ 0.99	33.60 $\pm$ 0.91	11.01 $\pm$ 1.83	10.369
	SD	14.87	12.43	11.26	(<0.001)
	Median	32.47	35.44	8.63	
	Range	-4.23 to 63.0	0.20 to 63.0	-4.23 to 50.14	

Last column gives t statistic and p value for comparison of the two subsets.



**FIG. 1.** Mean ( $\pm$  SD) of BISF-W dimension scores D1 (thoughts/desire), D2 (arousal), D3 (frequency of sexual activity), D4 (receptivity/initiation), D5 (pleasure/orgasm), D6 (relationship satisfaction), and D7 (problems affecting sexual function) in healthy women with regular sexual partners (n = 187) and healthy women without regular partners (n = 38). p values (< 0.001) indicate statistical comparison of the two subsets based on t tests; NS denotes not significant.

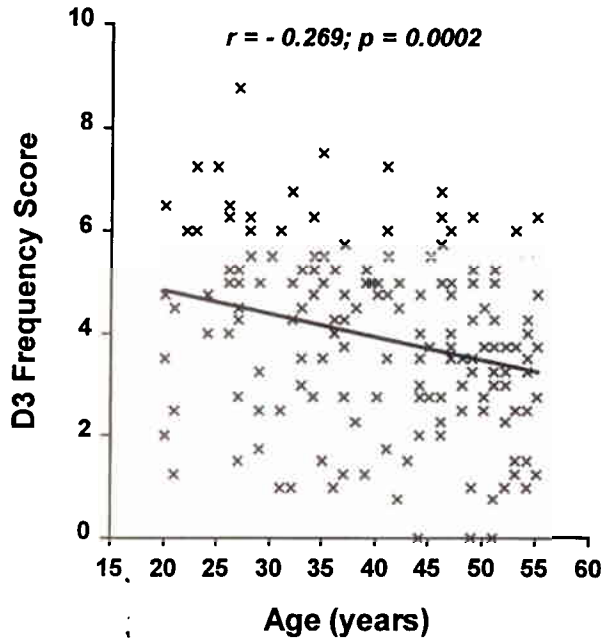


FIG. 2. Scatter plot of dimension D3 (frequency of sexual activity) versus age for healthy women with regular sexual partners. The age range of the subjects is 20 to 55 years. Solid line displays linear regression (correlation coefficient is denoted by  $r$ ,  $p$  value by  $p$ ).

of note that 97 patients in the clinical sample (93.3%) had composite scores that were below the normative mean (i.e., <33.6), including 63 patients (60.6%) whose composite scores were more than 1 SD below the normative mean (i.e., <21.2).

Cronbach's alpha coefficients, which measure the internal consistency of dimensions composed of multiple questions, had the following values: 0.72 for D1, 0.39 for D2, 0.45 for D4, 0.72 for D5, 0.61 for D6, and -0.08 for D7. Values of 0.70 or greater are considered acceptable.<sup>6</sup>

### DISCUSSION

Assessment of sexual function in clinical trials requires the use of standardized instruments with adequate validity and reliability.<sup>6-8</sup> An important aspect of an instrument's validity is its sensitivity to functional versus dysfunctional status.<sup>7</sup> This report describes the development and initial validation of a new scoring algorithm for the BISF-W that provides a single composite score as well as scores on seven dimensions of sexual function. Dimensions D1 (thoughts/desire), D2 (arousal), and D5 (pleasure/orgasm) correspond well to Kaplan's<sup>9</sup> triphasic model of the sexual response cycle, which has been

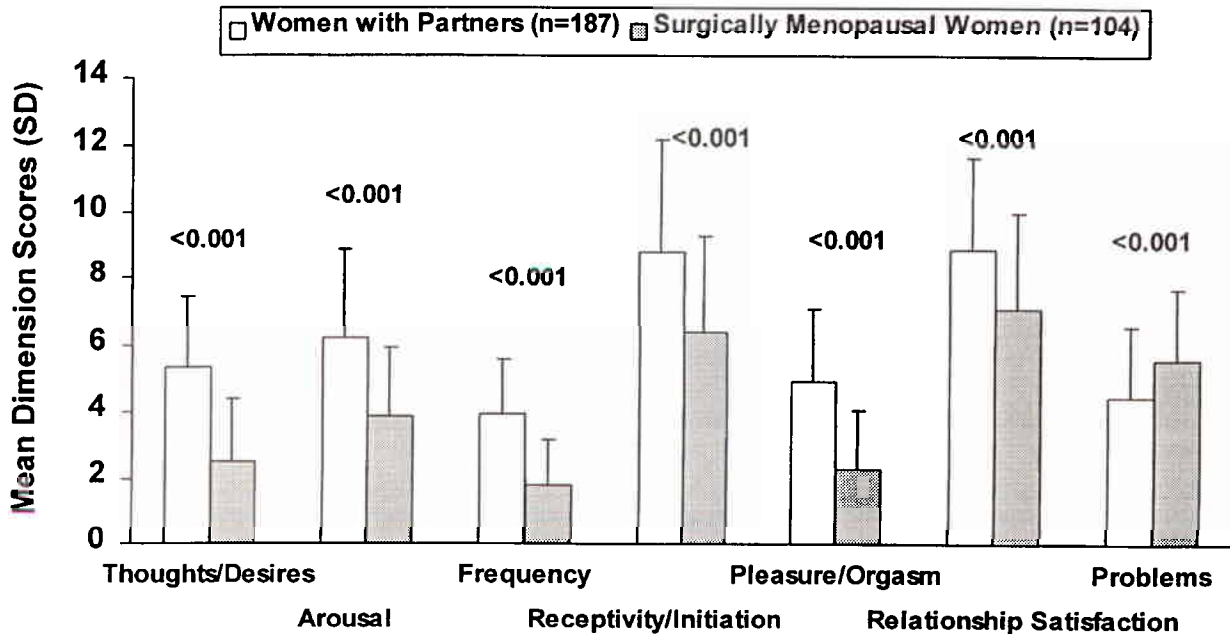


FIG. 3. Mean ( $\pm$  SD) of BISF-W dimension scores D1 (thoughts/desire), D2 (arousal), D3 (frequency of sexual activity), D4 (receptivity/initiation), D5 (pleasure/orgasm), D6 (relationship satisfaction), and D7 (problems affecting sexual function) in healthy women with regular sexual partners ( $n = 187$ ) and surgically menopausal women with impaired sexual function ( $n = 104$ ).  $p$  values ( $< 0.001$ ) indicate statistical comparison of the two groups based on  $t$  tests. It should be noted that the data in the two populations were collected in separate studies.



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**TABLE 3.** Descriptive statistics (mean  $\pm$  SEM, SD, median, and range) for BISF-W dimension and composite scores in surgically menopausal women. Mean values are also expressed as % of the normative mean for healthy women with partners (from Table 2).

Dimension	Descriptive statistics	Surgically menopausal women (n = 104)	% Normative mean (healthy women with partners)	t statistic (p value)
D1 Thoughts/Desire	Mean $\pm$ SEM	2.50 $\pm$ 0.18	47.2	-11.10 ( $<0.001$ )
	SD	1.88		
	Median	2.43		
	Range	0 to 8.14		
D2 Arousal	Mean $\pm$ SEM	3.85 $\pm$ 0.20	62.0	-7.82 ( $<0.001$ )
	SD	2.04		
	Median	4.00		
	Range	0 to 10		
D3 Frequency of Sexual Activity	Mean $\pm$ SEM	1.83 $\pm$ 0.13	46.9	-10.76 ( $<0.001$ )
	SD	1.32		
	Median	1.50		
	Range	0 to 5.25		
D4 Receptivity/Initiation	Mean $\pm$ SEM	6.39 $\pm$ 0.29	72.2	-6.29 ( $<0.001$ )
	SD	2.92		
	Median	6.50		
	Range	0 to 13		
D5 Pleasure/Orgasm	Mean $\pm$ SEM	2.26 $\pm$ 0.18	46.1	-10.61 ( $<0.001$ )
	SD	1.81		
	Median	1.88		
	Range	0 to 8		
D6 Relationship Satisfaction	Mean $\pm$ SEM	7.07 $\pm$ 0.29	79.4	-5.27 ( $<0.001$ )
	SD	2.93		
	Median	7.00		
	Range	0 to 12		
D7 Problems Affecting Sexual Function	Mean $\pm$ SEM	5.55 $\pm$ 0.21	124.2	4.22 ( $<0.001$ )
	SD	2.10		
	Median	5.50		
	Range	0.63 to 10.33		
Composite score	Mean $\pm$ SD	18.35 $\pm$ 0.97	54.6	-10.75 ( $<0.001$ )
	SD	9.94		
	Median	18.44		
	Range	-6.88 to 43.52		

Last column gives t statistic and p value for comparison of surgically menopausal women and healthy women with partners (from Table 2).

advocated by Derogatis and Conklin-Powers<sup>7</sup> and others<sup>10</sup> as a conceptual model for evaluating female sexual dysfunction. The arousal dimension (D2) combines the subjective assessment of arousal with feelings of being anxious or inhibited, which result in lower scores. Dimension D3 (frequency of sexual activity) provides an index of the quantity and variety of sexual activity engaged in during the sexual response cycle, whereas dimension D4 (receptivity/initiation) may be viewed as a behavioral correlate of sexual desire. Dimensions D6 (relationship satisfaction) and D7 (problems affecting sexual function) provide important indices of the emotional context in which sexual activity occurs as well as a variety of problems that can adversely impact sexual functioning.

Simple procedures have been developed for numerical weighting of individual items in the BISF-W and for calculation of the resulting dimension and composite scores. Combined with its ease of administration, the new scoring system greatly facilitates the use of this

instrument in clinical trials. In addition, the present work provides further validity for the BISF-W by establishing normative parameters in healthy subjects, including the effects of partner availability and age, and by demonstrating the sensitivity of the instrument in a clinical sample of surgically menopausal women with complaints of impaired sexual function. The psychometric assessment of the new scoring algorithm demonstrated acceptable alpha coefficients ( $\geq 0.70$ ) for dimensions D1 (thoughts/desire) and D5 (pleasure/orgasm). The low value obtained for D7 (problems affecting sexual function) may reflect the heterogeneous types of sexual problems included in this dimension. For dimension D3 (frequency of sexual activity), which is based on a single question, an alpha coefficient cannot be computed.

As expected from the prior descriptive analysis of the normative population,<sup>3</sup> the presence of a sexual partner strongly influenced all BISF-W dimensions with the exception of D1 (thoughts/desire), which was

comparable in both subsets (i.e., women with and without partners). This finding suggests that healthy women without partners retain sexual interest and desire despite the lack of opportunity to respond to, initiate, and/or engage in sexual activity with a partner. That the dimensions D1 (thoughts/desire), D3 (frequency of sexual activity), and D5 (pleasure/orgasm) decrease modestly with increasing age in healthy women with partners is also consistent with the prior analysis<sup>3</sup> and with a recently reported cross-sectional study that showed that sexual activity in women decreases between the ages of 25 and 59 years.<sup>11</sup>

The evaluation of surgically menopausal women with impaired sexual function (all of whom had sexual partners) demonstrated the sensitivity and specificity of the BISF-W to this condition. The markedly lower scores for D1 (thoughts/desire), D3 (frequency of sexual activity), and D5 (pleasure/orgasm) relative to healthy women with partners, and the significant increase in D7 (problems affecting sexual function) clearly differs from the "partner effect" seen in healthy women (compare Figs. 1 and 3). These findings suggest that diminished thoughts/desire (i.e., loss of libido) is an identifiable characteristic of surgically menopausal women who report that their "sex life" became less active or less satisfying after surgery, despite conventional estrogen replacement therapy. This finding is consistent with the studies of Sherwin et al.<sup>12,13</sup> of oophorectomized women, which showed reductions in sexual desire and fantasy after surgery and improvement in these aspects during treatment with testosterone ester injections. These findings suggest that ovarian androgen production, which contributes about 50% of the circulating testosterone levels in premenopausal women,<sup>14</sup> may be an important determinant of libido in women. The associated decreases in sexual activity (D3) and pleasure/orgasm (D5) in our patient group may be consequences of decreased libido and/or direct correlates of diminished testosterone. In regard to orgasm, Kaplan and Owett<sup>15</sup> and others<sup>16-19</sup> have suggested that testosterone may have a direct effect on genital sensitivity and facilitate orgasm. Further studies of surgically menopausal women and the effects of testosterone replacement will be needed to better understand these issues.

Limitations of the BISF-W, the new scoring algorithm, and the comparisons made in the present study, include the following. First, assessment of sexual functioning is limited to the "past month," because the instrument is intended for evaluating the response to treatment in clinical trials. As such, the BISF-W does not provide long-term information on the subject's past history of sexual functioning and should not be used as a substi-

tute for history taking or clinical diagnosis. Second, certain items that are scored with zeros may indicate either the absence of a partner, the lack of activity, or low sexual functioning. Because of this ambiguity, the dimension and composite scores should be interpreted carefully for patients who are not sexually active or do not have a current sexual partner. For this reason, the patient group in the present study was compared with subjects in the normative sample who were in a current sexual relationship. Third, the validation data presented here were derived from a sample of patients with a specific factor contributing to sexual dysfunction, i.e., surgical menopause. To assess sexual dysfunction in other conditions (e.g., natural menopause, drug-related, psychogenic, etc.) further validation studies will be needed. Lastly, it should be recognized that the data in the normative population and surgically menopausal women were collected at different times and in different geographies, and that the comparison between groups was a historical one, which could not be controlled for possible differences in socioeconomic status. Despite these limitations, the present results nevertheless suggest that the BISF-W provides a sensitive measure of sexual functioning, which clearly differentiates between the patterns of sexual response in a population of surgically menopausal women with complaints of impaired sexual function and a population of healthy controls of comparable age. It should be appreciated, however, that these findings may not generalize to all women who undergo surgical menopause.<sup>20</sup>

## CONCLUSIONS

A quantitative scoring algorithm has been developed for the BISF-W that allows one to compute a composite sexual function score and seven dimension scores relevant to female sexuality. This research provides further validity for the BISF-W and facilitates its use as a tool for evaluating female sexual function in clinical trials. In so doing it has provided specific information about the nature and degree of impaired sexual function in a population of surgically menopausal women.

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**APPENDIX 1: THE BRIEF INDEX OF SEXUAL FUNCTIONING FOR WOMEN (BISF-W)**

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*This index covers material that is sensitive and personal. Your responses will be kept completely confidential. If you are unable or do not wish to answer any question, you may leave it blank.*

*Answer the following questions by choosing the most accurate response for the past month.*

1. Do you currently have a sex partner? \_\_\_\_\_ Yes \_\_\_\_\_ No
2. Have you been sexually active during the past month? \_\_\_\_\_ Yes \_\_\_\_\_ No
3. During the past month, how frequently have you had sexual thoughts, fantasies, or erotic dreams? (*Please circle the most appropriate response.*)
  - (0) Not at all
  - (1) Once
  - (2) 2 or 3 times
  - (3) Once a week
  - (4) 2 or 3 times per week
  - (5) Once a day
  - (6) More than once a day
4. Using the scale to the right, indicate how frequently you have felt a desire to engage in the following activities during the past month? (*An answer is required for each, even if it may not apply to you.*)

Erotic Kissing	_____	(0) Not at all
Masturbation alone	_____	(1) Once
Mutual masturbation	_____	(2) 2 or 3 times
Petting and foreplay	_____	(3) Once a week
Oral sex (giving or receiving)	_____	(4) 2 or 3 times per week
Vaginal penetration or intercourse	_____	(5) Once a day
Anal sex	_____	(6) More than once a day
5. Using the scale to the right, indicate how frequently you have become aroused by the following sexual experiences during the past month. (*An answer is required for each, even if it may not apply to you.*)

Erotic Kissing	_____	(0) Have not engaged in this activity
Dreams or fantasy	_____	(1) Not at all
Masturbation alone	_____	(2) Seldom, less than 25% of the time
Mutual masturbation	_____	(3) Sometimes, about 50% of the time
Petting and foreplay	_____	(4) Usually, about 75% of the time
Oral sex (giving or receiving)	_____	(5) Always became aroused
Vaginal penetration or intercourse	_____	
Anal sex	_____	
6. Overall, during the past month, how frequently have you become anxious or inhibited during sexual activity with a partner? (*Please circle the most appropriate response.*)
  - (0) I have not had a partner
  - (1) Not at all anxious or inhibited
  - (2) Seldom, less than 25% of the time
  - (3) Sometimes, about 50% of the time
  - (4) Usually, about 75% of the time
  - (5) Always became anxious or inhibited

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7. Using the scale to the right, indicate how frequently you have engaged in the following experiences during the past month. *(An answer is required for each, even if it may not apply to you.)*

- |                                    |       |                           |
|------------------------------------|-------|---------------------------|
| Erotic Kissing                     | _____ | (0) Not at all            |
| Sexual fantasy                     | _____ | (1) Once                  |
| Masturbation alone                 | _____ | (2) 2 or 3 times          |
| Mutual masturbation                | _____ | (3) Once a week           |
| Petting and foreplay               | _____ | (4) 2 or 3 times per week |
| Oral sex (giving or receiving)     | _____ | (5) Once a day            |
| Vaginal penetration or intercourse | _____ | (6) More than once a day  |
| Anal sex                           | _____ |                           |

8. During the past month, who has usually initiated sexual activity? *(Please circle the most appropriate response.)*

- (0) I have not had a sexual partner
- (1) I have not had sex with a partner during the past month
- (2) I usually have initiated activity
- (3) My partner and I have equally initiated activity
- (4) My partner usually has initiated activity

9. During the past month, how have you usually responded to your partner's sexual advances? *(Please circle the most appropriate response.)*

- (0) I have not had a partner
- (1) Has not happened during the past month
- (2) Usually refused
- (3) Sometimes refused
- (4) Accepted reluctantly
- (5) Accepted, but not necessarily with pleasure
- (6) Usually accepted with pleasure
- (7) Always accepted with pleasure

10. During the past month, have you felt pleasure from any forms of sexual experience? *(Please circle the most appropriate response.)*

- (0) I have not had a partner
- (1) Have had no sexual experience during the past month
- (2) Have not felt any pleasure
- (3) Seldom, less than 25% of the time
- (4) Sometimes, about 50% of the time
- (5) Usually, about 75% of the time
- (6) Always felt pleasure

11. Using the scale to the right, indicate how often you have reached orgasm during the past month with the following activities. *(An answer is required for each, even if it may not apply to you.)*

- |                                    |       |                                       |
|------------------------------------|-------|---------------------------------------|
| In dreams or fantasy               | _____ | (0) I have not had a partner          |
| Erotic Kissing                     | _____ | (1) Have not engaged in this activity |
| Masturbation alone                 | _____ | (2) Not at all                        |
| Mutual masturbation                | _____ | (3) Seldom, less than 25% of the time |
| Petting and foreplay               | _____ | (4) Sometimes, about 50% of the time  |
| Oral sex (giving or receiving)     | _____ | (5) Usually, about 75% of the time    |
| Vaginal penetration or intercourse | _____ | (6) Always reached orgasm             |
| Anal sex                           | _____ |                                       |

12. During the past month, has the frequency of your sexual activity with a partner been: *(Please circle the most appropriate response.)*

- (0) I have not had a partner
- (1) Less than you desired
- (2) As much as you desired
- (3) More than you desired

13. Using the scale to the right, indicate the level of change, if any, in the following areas during the past month. *(An answer is required for each, even if it may not apply to you.)*

- |                     |       |                           |
|---------------------|-------|---------------------------|
| Sexual interest     | _____ | (0) Not applicable        |
| Sexual arousal      | _____ | (1) Much lower level      |
| Sexual activity     | _____ | (2) Somewhat lower level  |
| Sexual satisfaction | _____ | (3) No change             |
| Sexual anxiety      | _____ | (4) Somewhat higher level |
|                     |       | (5) Much higher level     |

14. During the past month, how frequently have you experienced the following? *(An answer is required for each, even if it may not apply to you.)*

- |   |       |                                       |
|---|-------|---------------------------------------|
| Bleeding or irritation after vaginal penetration or intercourse | _____ | (0) Not at all                        |
| Lack of vaginal lubrication                                     | _____ | (1) Seldom, less than 25% of the time |
| Painful penetration or intercourse                              | _____ | (2) Sometimes, about 50% of the time  |
| Difficulty reaching orgasm                                      | _____ | (3) Usually, about 75% of the time    |
| Vaginal tightness   | _____ | (4) Always                            |
| Involuntary urination   | _____ |                                       |
| Headaches after sexual activity                                 | _____ |                                       |
| Vaginal infection   | _____ |                                       |

15. Using the scale to the right, indicate the frequency with which the following factors have influenced your level of sexual activity during the past month. *(An answer is required for each, even if it may not apply to you.)*

- |  |       |                                       |
|--|-------|---------------------------------------|
| My own health problems (for example, infection, illness) | _____ | (0) I have not had a partner          |
| My partner's health problems                             | _____ | (1) Not at all                        |
| Conflicts in the relationship                            | _____ | (2) Seldom, less than 25% of the time |
| Lack of privacy  | _____ | (3) Sometimes, about 50% of the time  |
| Other (please specify):                                  | _____ | (4) Usually, about 75% of the time    |
|  |       | (5) Always                            |

16. How satisfied are you with the overall appearance of your body? *(Please circle the most appropriate response.)*

- (0) Very satisfied
- (1) Somewhat satisfied
- (2) Neither satisfied nor dissatisfied
- (3) Somewhat dissatisfied
- (4) Very dissatisfied

17. During the past month, how frequently have you been able to communicate your sexual desires or preferences to your partner? *(Please circle the most appropriate response.)*

- (0) I have not had a partner
- (1) I have been unable to communicate my desires or preferences
- (2) Seldom, about 25% of the time
- (3) Sometimes, about 50% of the time
- (4) Usually, about 75% of the time
- (5) I was always able to communicate my desires or preferences

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18. Overall, how satisfied have you been with your sexual relationship with your partner? *(Please circle the most appropriate response.)*
- (0) I have not had a partner
  - (1) Very satisfied
  - (2) Somewhat satisfied
  - (3) Neither satisfied nor dissatisfied
  - (4) Somewhat dissatisfied
  - (5) Very dissatisfied
19. Overall, how satisfied do you think your partner has been with your sexual relationship? *(Please circle the most appropriate response.)*
- (0) I have not had a partner
  - (1) Very satisfied
  - (2) Somewhat satisfied
  - (3) Neither satisfied nor dissatisfied
  - (4) Somewhat dissatisfied
  - (5) Very dissatisfied
20. Overall, how important a part of your life is your sexual activity? *(Please circle the most appropriate response.)*
- (0) Not at all important
  - (1) Somewhat unimportant
  - (2) Neither important nor unimportant
  - (3) Somewhat important
  - (4) Very important
21. Circle the number that corresponds to the statement that best describes your sexual experience.
- (1) Entirely heterosexual
  - (2) Largely heterosexual, but some homosexual experience
  - (3) Largely heterosexual, but considerable homosexual experience
  - (4) Equally heterosexual and homosexual
  - (5) Largely homosexual, but considerable heterosexual experience
  - (6) Largely homosexual, but some heterosexual experience
  - (7) Entirely homosexual
22. Circle the number that corresponds to the statement that best describes your sexual desires.
- (1) Entirely heterosexual
  - (2) Largely heterosexual, but some homosexual desires
  - (3) Largely heterosexual, but considerable homosexual desires
  - (4) Equally heterosexual and homosexual
  - (5) Largely homosexual, but considerable heterosexual desires
  - (6) Largely homosexual, but some heterosexual desires
  - (7) Entirely homosexual

**APPENDIX 2: NEW SCORING ALGORITHM FOR THE BISF-W**

The scoring of each question, the possible score range, and the dimension (D1 to D7) to which the question contributes, are as follows:

Questions 1 and 2: Yes/No responses are not scored. They provide demographic information and do not contribute to any dimension.

Question 3: Responses are scored as (0) = 0, (1) = 1, (2) = 2, (3) = 3, (4) = 4, (5) = 5, (6) = 6. The possible score range is 0 to 6. The question contributes to D1 (Thoughts/Desire).

Question 4: Responses for each of the seven items are scored as (0) = 0, (1) = 1, (2) = 2, (3) = 3, (4) = 4, (5) = 5, (6) = 6. The total score is the sum of the item scores divided by 7. The possible score range is 0 to 6. The question contributes to D1 (Thoughts/Desire).

Question 5: Responses for each of the eight items are scored as (0) = 0/Not applicable, (1) = 0, (2) = 1, (3) = 2, (4) = 3, (5) = 4. The total score is the sum of the item scores divided by 4. The possible score range is 0 to 8. The question contributes to D2 (Arousal).

Question 6: Responses are scored as (0) = 0/Not applicable, (1) = 4, (2) = 3, (3) = 2, (4) = 1, (5) = 0. The possible score range is 0 to 4. The question contributes to D2 (Arousal).

Question 7: Responses for each of the eight items are scored as (0) = 0, (1) = 1, (2) = 2, (3) = 3, (4) = 4, (5) = 5, (6) = 6. The total score is the sum of the item scores divided by 4. The possible score range is 0 to 12. The question contributes to D3 (Frequency of Sexual Activity).

Question 8: Responses are scored as (0) = 0/Not applicable, (1) = 0, (2) = 6, (3) = 4, (4) = 2. The possible score range is 0 to 6. The question contributes to D4 (Receptivity/Initiation).

Question 9: Responses are scored as (0) = 0/Not applicable, (1) = 0/Not applicable, (2) = 0, (3) = 1, (4) = 2, (5) = 3, (6) = 4, (7) = 5. The possible score range is 0 to 5. The question contributes to D(4) (Receptivity/Initiation).

Question 10: Responses are scored as (0) = 0/Not applicable, (1) = 0/Not applicable, (2) = 0, (3) = 1, (4) = 2, (5) = 3, (6) = 4. The possible score range is 0 to 4. The question contributes to D5 (Pleasure/Orgasm).

Question 11: Responses for each of the eight items are scored as (0) = 0/Not applicable, (1) = 0/Not applicable, (2) = 0, (3) = 1, (4) = 2, (5) = 3, (6) = 4. The total score is the sum of the item scores divided by 4. The possible score range is 0 to 8. The question contributes to D5 (Pleasure/Orgasm).

Question 12: Responses are scored as (0) = 0/Not applicable, (1) = 4, (2) = 2, (3) = 0. The possible score range is 0 to 4. The question contributes to D4 (Receptivity/Initiation).

Question 13: Responses for each of the five items are scored as (0) = 0/Not applicable, (1) = -2, (2) = -1, (3) = 0, (4) = 1, (5) = 2. The total score is the sum of the item scores. The possible score range is -10 to 10. The question measures change during the past month and does not contribute to any dimension.

Question 14: Responses for each of the eight items are scored as (0) = 0, (1) = 1, (2) = 2, (3) = 3, (4) = 4. The total score is the sum of the item scores divided by 8. The possible score range is 0 to 4. The question contributes to D7 (Problems Affecting Sexual Function).

Question 15: Responses for each of the five items (including other, if specified) are scored as (0) = 0/Not applicable, (1) = 0, (2) = 1, (3) = 2, (4) = 3, (5) = 4. The total score is the sum of the item scores divided by 5. The possible score range is 0 to 4. The question contributes to D7 (Problems Affecting Sexual Function).

Question 16: Responses are scored as (0) = 0, (1) = 1, (2) = 2, (3) = 3, (4) = 4. The possible score range is 0 to 4. The question contributes to D7 (Problems Affecting Sexual Function).

Question 17: Responses are scored as (0) = 0/Not applicable, (1) = 4, (2) = 3, (3) = 2, (4) = 1, (5) = 0. The possible score range is 0 to 4. The question contributes to D7 (Problems Affecting Sexual Function).

Question 18: Responses are scored as (0) = 0/Not applicable, (1) = 4, (2) = 3, (3) = 2, (4) = 1, (5) = 0. The possible score range is 0 to 4. The question contributes to D6 (Relationship Satisfaction).



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Question 19: Responses are scored as (0) = 0/Not applicable, (1) = 4, (2) = 3, (3) = 2, (4) = 1, (5) = 0. The possible score range is 0 to 4. The question contributes to D6 (Relationship Satisfaction).

Question 20: Responses are scored as (0) = 0, (1) = 1, (2) = 2, (3) = 3, (4) = 4. The possible score range is 0 to 4. The question contributes to D6 (Relationship Satisfaction).

Questions 21 and 22: Responses are not scored. The questions provide information on sexual orientation not pertinent to the scoring of any dimension.

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