BRIEF REPORT

Bibliotherapy for Low Sexual Desire: Evidence for Effectiveness

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This study examines the effectiveness of bibliotherapy for low sexual desire among women, which is the most frequent sexual concern brought to counselors. Forty-five women responded to an advertisement for participation in a study on low sexual desire and were assigned to either the intervention or the wait-list control group. The intervention group completed the Hurlbert Index of Sexual Desire (HISD; Apt & Hurlbert, 1992) and the Female Sexual Function Index (FSFI; R. Rosen et al., 2000), read the self-help book under study in 6 weeks, and completed the measures a second time. The control group completed the same measures 6 weeks apart. Results demonstrated that the intervention group made statistically greater gains over time as compared with the control group on measures of sexual desire (HISD and FSFI Desire subscale), sexual arousal (FSFI Arousal subscale), sexual satisfaction (FSFI Satisfaction subscale), and overall sexual functioning (FSFI Total Score). A subset of participants in the intervention group participated in a 7-week follow-up study, and these participants maintained their gains in sexual desire and overall sexual functioning. Findings have important implications for future research on the efficacy of bibliotherapy generally and for low sexual desire specifically. Results also have vital implications for the treatment of low sexual desire.

Keywords: low sexual desire, sexual dysfunction, self-help, bibliotherapy

Although women struggle with a variety of sexual concerns, "without a doubt, the most common sexual complaint-by women of all ages-is absent or low sexual desire" (Basson, 2007, p. 25). Research finds that 20%-52% of women experience low sexual desire at some point in their lives (Laumann, Michael, & Kolata, 1995; Laumann, Paik, & Rosen, 1999; Shifren, Monz, Russo, Segreti, & Johannes, 2008; West et al., 2008). Low desire is the number one problem brought to clinicians working with sexual issues (Brotto, Basson, & Luria, 2008; Schnarch, 2000). At the same time, it is the most difficult sexual concern to treat (Basson, 2007), and presently, no standard treatment exists (Ullery, Millner, & Willingham, 2002). Given that low desire is associated with decreased quality of life, physical and emotional dissatisfaction, and marital distress (Brotto et al., 2008; Laumann et al., 1999; Trudel, Landry, & Larose, 1997), the need for validated psychological treatments has been pronounced as "urgent" (Brotto et al., 2008, p. 1684).

In reviewing the status of psychological treatments for female sexual dysfunctions, Heiman (2002) noted that, in contrast to orgasmic disorders for which rigorous clinical trials exist and sexual pain disorders for which promising uncontrolled trials exist, there is almost no data on treating low sexual desire. We were able to locate only three studies evaluating treatment for low sexual desire (Brotto et al., 2008; Hurlbert, 1993; Trudel et al., 2001). All three evaluated group therapy. Participants in both Hurlbert's eight-session combined marital and sex therapy couple group and Trudel's 12-session cognitive-behavioral couple group reported increased sexual desire at the end of treatment. The same held true for Brotto et al.'s group treatment for women with sexual arousal and desire disorders. This three-session intervention, conducted over 6 weeks, contained educational components, sex and relationship therapy components, cognitive-behavioral interventions, and training in mindfulness techniques.

Although Brotto and colleagues' (2008) approach is particularly promising due to its brevity and ability to treat women individually (i.e., not all partners are willing to come to treatment), it requires trained professionals. This is problematic, as only a minority of psychologists has training in sexuality (Weiderman & Sansone, 1999). Additionally, insurance companies often do not cover psychological treatment for sexual dysfunctions (Westheimer, 2007). Thus, treatment modalities capable of reaching significant numbers of women at a low cost are greatly needed.

One such approach is self-help (Norcross, 2006; van Lankveld, 2009). Although the aforementioned review delineates the need for effective, accessible treatment for women's low sexual desire, the rationale for studying self-help must be understood within four broader contexts: America, psychology, counseling psychology,

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and sex therapy. First, Americans are more likely to turn to self-help than to seek the services of mental health professionals (Norcross, 2006), and this is especially true of those seeking help for sexual concerns (Catania, Pollack, McDermott, Qualls, & Cole, 1990; R. Rosen et al., 2009). Scholars in psychology have thus called for increased attention to evaluating the efficacy of self-help (McKendree-Smith, Floyd, & Scogin, 2003; Norcross, 2006; G. M. Rosen, 2004). Although focused on online forms of selfhelp, Chang (2005) urged counseling psychology's involvement, noting that "... while counseling psychologists are well positioned in terms of their training and expertise to conduct research [on] ... self-help . . ., this agenda is not yet at the forefront of counseling psychology" (p. 888). Conversely, self-help approaches are often highlighted in the literature on treating sexual dysfunction. One form of self-help, bibliotherapy, has been touted as occupying "a stable position in . . . treatment" (van Lankveld, 2009, p. 143).

This established position is based on research. Two metaanalyses (Gould & Clum, 1993; Marrs, 1995) found that bibliotherapy for sexual dysfunctions demonstrated the highest relative effect sizes compared with bibliotherapy for other problems (e.g., depression). In both meta-analyses, the effect sizes (Cohen's d) for bibliotherapy for sexual dysfunction were large (i.e., greater than 1.0), although the number of studies included was small. A metaanalysis focusing exclusively on bibliotherapy for sexual dysfunction found an average effect size (Cohen's d) of .68 compared with no-treatment groups (van Lankveld, 1998). The majority of studies included in this meta-analysis focused on orgasm problems among women; none focused on low sexual desire. In a recent review, Hubin, DeSutter, and Reynaert (2011) noted that there are no studies specifically examining the efficacy of bibliotherapy for low sexual desire.

The present study seems to be the first to investigate bibliotherapy for low sexual desire. The target population was partnered heterosexual women who self-identified as experiencing low sexual desire, which they attributed to stress and exhaustion. This specific population was chosen to match the intended audience of the book under study, "A Tired Woman's Guide to Passionate Sex" (Mintz, 2009). Although the book author's rationale for targeting this audience is noted in the book itself, the sampling was based on the logic that a self-help book should be studied in the population for which it is intended to be effective. Such sampling is also in line with Heiman's (2002) suggestion that studies examining treatments for low sexual desire be conducted with "... specifically defined samples with respect to suspected etiological factors" (p. 447). The question under study was whether women reading this book would make significantly greater gains over time in sexual desire and related aspects of sexual functioning (arousal, lubrication, satisfaction, orgasm, and pain) as compared with a wait-list control group. Another question was whether gains would be maintained at follow-up.

Method

Participants

Fifty-six women were randomly assigned to the intervention or wait-list control (WLC) groups. Only participants who completed both pre- and posttest measures were included in the final sample. The final sample included 26 participants in the WLC group, as two participants did not complete pretest measures, and 19 participants in the intervention group, as one participant did not complete pretest measures and eight did not complete posttest measures.

All participants identified as heterosexual and married. Marriage length ranged from 4.5 to 29 years (M = 15.88, SD = 7.14). Ages ranged from 28 to 57 (M = 40.18, SD = 8.17). The sample largely identified as White (n = 41; 91%); two identified as Middle Eastern, one as Latina, and one as being of "Other Ethnicity." The majority (n = 32; 71.1%) identified as Christian; other affiliations were nonreligious (n = 4), agnostic (n = 4), Jewish (n = 1), atheist (n = 1) or "Other Religion" (n = 3). About 7% reported having a high school degree, 9% an associate's degree, 18% some college, 20% a bachelor's degree, 42% graduate or professional training, and 4% endorsed "Other Education." All but one reported that she was currently employed, with 93% employed full time and 7% employed part time. Household incomes were as follows: \$25,000-\$50,000 (18%); \$50,000-\$75,000 (27%); \$75,000-\$100,000 (42%); \$100,000 or more per year (13%). Sixty-seven percent of participants had children living at home.

Measures

The Hurlbert Index of Sexual Desire (HISD; Apt & Hurlbert, 1992) was used as a measure of sexual desire. Total scores on this 25-item measure range from zero to 100, with items rated on a 5-point Likert-type scale, ranging from 0 (*all of the time*) to 4 (*never*). Higher scores indicate higher levels of sexual desire. Beck (1995) reports good internal consistency ($\alpha = .86$); test–retest reliability (r = .86); and concurrent, construct, and discriminant validity. Internal consistency in this study was $\alpha = .93$ at pretest and $\alpha = .94$ at posttest.

The Female Sexual Function Index (FSFI; R. Rosen et al., 2000) was used as a second measure of desire, as well as of five related aspects of sexual functioning (arousal, lubrication, orgasm, satisfaction, and pain) and overall sexual functioning. This 19-item measure is among the most widely used inventories of sexual functioning, recognized for its strong validity across multiple studies (Meyer-Bahlburg & Dolezal, 2007), including its ability to differentiate between those with and without sexual dysfunction (Wiegel, Meston, & Rosen, 2005). The six domain scores have been supported via factor analysis (R. Rosen et al., 2000). The following score ranges are derived from a scoring algorithm: Desire 1.2-6; Arousal 0-6; Lubrication 0-6; Orgasm 0-6; Satisfaction .8-6; and Pain 0-6. The six domain scores are added to obtain a Total score (i.e., overall sexual functioning). Higher scores represent higher levels of sexual functioning. R. Rosen et al. (2009) report good (r = .88) 2- to 4-week test-retest reliability for the total scale and individual domains (r = .79-.86), as well as very good internal consistency for both the total scale ($\alpha = .97$) and the individual domains ($\alpha = .89-.96$). Internal consistency (α) for the FSFI in this study was as follows for pre- and posttest, respectively: Overall Sexual Functioning (.96, .97), Desire (.89, .92), Arousal (.95, .96), Lubrication (.97, .98) Orgasm (.94, .95), Satisfaction (.78, .89), and Pain (.98, .99).

Procedure

Campus Institutional Review Board (IRB) approval was sought, including disclosing that the author of the book was an investigator and addressing conflict of interest issues. As detailed in the IRB application, although the book author stands to benefit from book sales that result from a publication on the efficacy of the book, this conflict is minimal in that book royalties are quite low. Additionally, earlier bibliotherapy efficacy studies have been conducted by the authors of the books under investigation (e.g., Morokoff, & LoPiccolo, 1986). Moreover, book authors holding responsibility for assessing the effectiveness of their products is in line with recent recommendations (McKendree-Smith et al., 2003). Importantly, the book author was not involved in participant recruitment, data collection, or data analysis.

After receiving IRB approval, an advertisement was included in a weekly campus-wide e-mail distributed at a large public midwestern university. The title read, "Seeking Women Who Feel Too Tired for Sex for an Intervention Study." The body stated that researchers were seeking "heterosexual married women who feel satisfied with their marriages but who are bothered by low sex drive which they believe to be caused by stress and exhaustion." The advertisement explained that the study involved reading a free copy of "A Tired Woman's Guide to Passionate Sex" and answering personal questions on sexual functioning. Those interested were instructed to contact the researchers to enroll or learn more information.

A priori power analyses revealed that about 40 participants would be needed to obtain a medium effect size at a power of .80. Additional participants were recruited to minimize attrition effects. The first 56 women who contacted the researchers were enrolled and randomly assigned to the intervention or WLC group. All participants were e-mailed a link to the informed consent and the pretest measures. Following completion of the pretest measures, intervention group participants were mailed a copy of the book and instructed to read it in 6 weeks, whereas WLC group participants were sent a letter stating they would receive the book in 6 weeks after completing additional measures. Three weeks later, intervention group participants were sent an e-mail reminding them that they had 3 more weeks to complete the book. WLC group participants were sent an e-mail reminding them that they would be sent an online survey in 3 weeks, upon completion of which they would be sent the book.

Six weeks after participants completed pretest measures, they were e-mailed links to the posttest measures. Participants were also asked to indicate whether they had done anything outside of the study to address their concerns with low sexual desire; none had, and all participants completing both pre- and posttest surveys were retained in the data analyses. Intervention group participants were also asked about book completion; participants, on average, reported reading 85% of the book. Intervention group participants were also asked whether they would be willing to participants were also asked whether they would be willing to participant in a follow-up study. Ten agreed to do so, but one had not completed the posttest measures, resulting in a sample of nine participants at follow-up. Seven weeks following the administration of the posttest measures.

Upon completing the study, participants were offered referrals. Across all survey administrations, participants not responding within 5 days were e-mailed up to two reminders, spaced 5 days apart. The only incentive provided for survey completion was the book, given to the intervention group after completing the pretest assessment and to the WLC group after the posttest assessment. No incentives were provided for completing the intervention.

Intervention

"A Tired Woman's Guide to Passionate Sex" (Mintz, 2009) is a 237-page self-help book designed as a treatment for heterosexual women struggling with low sexual desire. It was developed using research, theoretical, and clinical literature, as well as the author's clinical experience. The book contains three foundational chapters, including the author's story, the causes of low sexual desire, and the physical and emotional benefits of sex. The second foundational chapter details the multitude of reasons for low sexual desire, highlighting stress as a major cause and citing research (Bodenmann, Lederman, Blattner, & Galluzzo, 2006; Consumer Reports National Research Center, 2009) identifying a large proportion of heterosexual women who report that they are satisfied with their relationships and enjoy sex once it is underway, but for whom chronic stress has led to diminished or nonexistent desire. Following the foundational chapters are six chapters, each containing one step in a six-step psychoeducational and cognitivebehavioral treatment program. In the first step, Thoughts, the author uses cognitive techniques to promote positive thoughts about sexuality and instructs readers on mindfulness practices to be used during sexual encounters. The focus of the Talk step is on healthy general and sexual communication strategies. The Time step addresses goal setting and time management. The Touch step provides information on women's sexual responses and emphasizes affectionate and nongoal-directed erotic touching. The Spice step provides suggestions to add novelty to readers' sex lives. The Tryst step introduces the idea of scheduling sexual encounters, challenges the myth of spontaneous sex, and provides information on the concept of women's receptive sexual desire (Basson, 2000). Two appendices provide additional information (i.e., finding a therapist; resources for other sexual and psychological concerns).

Results

Preliminary Analyses

Due to the 28.6% posttest attrition rate in the intervention group, we conducted analyses of variance (ANOVAS) to determine whether significant differences in demographics or pretest outcome variables existed between those in the intervention group who completed the posttest measures and those who did not. No differences were found. We also conducted preliminary analyses to determine whether the intervention and WLC groups differed at pretest in terms of demographic or outcome variables. ANOVAS indicated that the only difference was on the FSFI Satisfaction subscale. Individuals in the WLC group reported lower satisfaction at pretest (M = 2.89, SD = 1.34) than did participants in the intervention group (M = 3.88, SD = 1.11), F(1, 44) = 6.94, p = .012. Analyses for the FSFI Satisfaction subscale were adjusted to reflect pregroup differences.

Short-Term Efficacy of Bibliotherapy Intervention

Although a common strategy is to conduct an omnibus multivariance analysis of variance F test followed with univariate analyses, many statisticians recommend separate univariate F tests on each outcome variable, with a Bonferroni correction used (Enders, 2003; Huberty & Morris, 1989; Jaccard & Guilamo-Ramos, 2002). Additionally, as multiple univariate tests are recommended in exploratory studies in which new treatments are being investigated (Huberty & Morris, 1989), we conducted repeated measures ANOVAs using pre- and posttest scores on the dependent measures to determine whether, as compared with those who did not read the book, women reading the book would make significantly greater gains over time in sexual desire, related aspects of sexual functioning (arousal, lubrication, orgasm, satisfaction, pain), and overall sexual functioning. To protect against the effects of inflated Type I error with running multiple analyses, we used the Holm (1979) modified Bonferroni method; the traditional Bonferroni method (α/k) often has low statistical power, whereas the Holm approach is more powerful and adequately maintains experimentwise error rates (Jaccard & Guilamo-Ramos, 2002). Given that comparative changes over time (pre- to posttest) across groups (intervention vs. control) was the question under investigation, the ANOVA results below pertain to the Group \times Time interaction. Also, because of problems associated with null hypothesis significance testing for interpreting social science data (see Ferguson, 2009, for a complete discussion), effect sizes are presented for all variables, regardless of significance levels of ANOVAs. Both standardized mean difference (Cohen's d) and strength of association indices (η_p^2) are reported (Ferguson, 2009; Sink & Stroh, 2006), along with interpretations (i.e., for Cohen's d, .2 = small, .5 = medium, and .8 = large; for η_p^2 , .01 ≥ small, $.06 \ge$ medium, and $.14 \ge$ large; Sink & Stroh, 2006).

On both measures of sexual desire, ANOVA results were significant. On the HISD, the intervention group mean increased from 34.03 at pretest to 52.44 at posttest, whereas the WLC group mean remained relatively unchanged (pretest M = 35.34, posttest M = 37.01), F(1, 43) = 42.69, p = .000, $\eta_p^2 = .50$ (large). The posttest effect size (Cohen's *d*) was 1.19 (large). The power was 1.0. This effect was mirrored on the FSFI Desire subscale, F(1, 43) = 38.47,

p = .000, $\eta_p^2 = .47$ (large). As seen in Table 1, the intervention group mean increased from 2.37 at pretest to 3.79 at posttest, whereas the WLC group mean decreased from 2.58 at pretest to 2.47 at posttest. Cohen's *d* was 1.36 (large). The power was 1.0.

The intervention group also made statistically significant gains over time as compared with the WLC group on the FSFI Arousal subscale, F(1, 43) = 8.41, p = .006, $\eta_p^2 = .16$ (large), and on the FSFI Total Score, F(1, 43) = 8.86, p = .005, $\eta_p^2 = .17$ (large). Cohen's *ds* for both were also large. The power was 0.81 for FSFI Arousal and 0.83 for FSFI Total. See Table 1.

Statistically significant results were not obtained on the FSFI Lubrication, Pain, or Orgasm subscales; the observed power for these analyses was .32, .47, and .38, respectively. Effect sizes were Lubrication: Cohen's d = .91 (large), $\eta_p^2 = .05$ (small); Orgasm: Cohen's d = 1.07 (large), $\eta_p^2 = .06$ (medium); and Pain: Cohen's d = .43 (small), $\eta_p^2 = .08$ (medium).

Due to pretest differences between groups on the FSFI Satisfaction subscale, we conducted an analysis of covariance. Posttest scores on the FSFI Satisfaction subscale was the dependent variable, group (intervention, WLC) was the independent variable, and FSFI Satisfaction subscale pretest scores was the covariate. The interaction of FSFI Satisfaction posttest scores and group was significant, F(1, 41) = 14.00, p = .001, $\eta_p^2 = .25$ (large). Cohen's *d* was 1.34 (large). The power was .96. Therefore, the FSFI Satisfaction posttest scores of the participants in the intervention group improved to a significantly greater extent than did those in the WLC group, even after controlling for pretest differences. Group means can be found in Table 1.

Longer Term Efficacy of the Bibliotherapy Intervention

Due to the small number (n = 9) of women who completed the 7-week follow-up study, these results must be considered exploratory. Nevertheless, preliminary analyses comparing the women participating versus not participating in the follow-up revealed

Table 1

Means, Standard Deviations, and Repeated Measures ANOVAs and ANCOVA for the Effects of Group on Eight Dependent Variables

Measure	Intervention group				Wait-list control group						
	Pretest		Posttest		Pretest		Posttest				
	М	SD	М	SD	М	SD	М	SD	F(1, 43)	р	d
HISD***	34.03	14.71	52.44	13.20	35.34	13.00	37.01	12.74	42.69	.000	1.19
Desire**	2.37	0.88	3.79	0.92	2.58	1.19	2.47	1.02	38.47	.000	1.36
Total**	22.72	7.05	29.42	4.30	20.04	9.44	20.52	9.33	8.86	.005	1.23
Arousal**	3.55	1.61	5.05	1.07	3.25	1.98	3.33	1.88	8.41	.006	1.12
Lub	4.31	1.80	5.35	0.66	3.59	2.25	3.85	2.24	2.30	.137	0.91
Org	4.15	1.78	5.16	0.82	3.23	2.22	3.38	2.19	2.87	.098	1.07
Pain	4.46	2.03	5.18	1.88	4.49	2.34	4.26	2.32	3.75	.059	0.43
Sat***	3.88	1.11	4.88	0.92	2.89	1.34	3.22	1.49	3.60	.065	1.34

Note. N = 45 for all analyses. For all measures, higher scores indicate higher levels aspects of sexual functioning. For all variables except Sat, analyses of variance (ANOVAs) were conducted. For Sat, an analysis of covariance (ANCOVA) was conducted; for this analysis, degrees of freedom were 1, 41. HISD = Hurlbert Index of Sexual Desire (range = 0–100); Desire = Female Sexual Functioning Index Desire subscale (range = 1.2–6); Total = Female Sexual Functioning Index Arousal subscale (range = 0–6); Lub = Female Sexual Functioning Index Lubrication subscale (range = 0–6); Org = Female Sexual Functioning Index Orgasm subscale (range = 0–6); Sat = Female Sexual Functioning Index Satisfaction subscale (range = 0–6); Pain = Female Sexual Functioning Index Pain subscale (range = 0–6). ** p < .01.

only one difference: Individuals who participated in the follow-up study tended to be married longer (M = 21.17, SD = 4.71) than those who did not (M = 10.13, SD = 2.70), F(1, 13) = 31.02, p = .000.

We conducted repeated measures ANOVAs comparing participants' scores on the dependent measures at pretest, posttest, and 7-week follow-up, with the Holm (1979) modified Bonferroni procedure used. Significant results were found for the HISD, F(2,7) = 24.94, p = .001, $\eta_p^2 = .88$ (large); power = 1.0. Significant results were also found for the FSFI Desire subscale, F(2, 7) =16.77, p = .002, $\eta_p^2 = .83$ (large); power = .99. Finally, significant results were found for the FSFI Total Score, F(2, 7) = 7.47, p =.018, η_p^2 = .68 (large); power = .79. For the HISD, the FSFI Desire subscale, and the FSFI Total Score, post hoc analyses indicated that pretest and posttest scores differed significantly and that pretest and follow-up scores differed significantly, but the posttest scores and follow-up scores did not differ significantly. In short, participants maintained gains on both measures of sexual desire (HISD and FSFI Desire subscale) as well as on the FSFI Total. See Table 2 for details.

Discussion

As far as we could determine, this was the first study to evaluate the efficacy of bibliotherapy for women concerned with low sexual desire. Women who read the book under study made greater gains in sexual desire, sexual arousal, sexual satisfaction, and overall sexual functioning than women in a wait-list control group. Among participants completing a 7-week follow-up study, gains in sexual desire and overall sexual functioning were maintained.

Although the book was written for women with low sexual desire, that arousal was also enhanced is consistent with the growing awareness of the overlap between these domains of women's sexuality (Balon, 2008). It also seems reasonable that if women's desire and arousal are enhanced, so too will be their sexual satisfaction. More curious is that gains in sexual desire, but not arousal or satisfaction, were maintained at follow-up. Perhaps

this is because the book was written with the aim of enhancing desire and results in the most lasting gains in this arena. Another explanation is that the study's focus on sexual desire may have primed participants to reflect more on their desire. Regardless, any conclusions regarding long-term gains must be viewed very cautiously, given the small number of participants in this phase of the study.

More robust findings pertain to the initial effectiveness of the book. Given a lack of research on bibliotherapy for low sexual desire, there are no direct comparator studies. One useful comparison is between the present study and Brotto et al.'s (2008) brief three-session group treatment. Both contained similar components, took place over 6 weeks, and used the FSFI (R. Rosen et al., 2000). Women in both interventions reported gains in desire. However, unlike those in the Brotto et al.'s study, women in this study also evidenced improvement in FSFI-assessed arousal, satisfaction, and overall sexual functioning. One explanation is sample selection. In this study, women self-identified as having a concern. In the Brotto et al. study, women were recruited from sexual medicine centers and interviewed to assure that they met criteria for a desire and/or arousal disorder using Basson et al.'s (2003) criteria. It might thus be assumed that the women in the Brotto sample had more bona fide concerns than those in this sample and therefore would not be expected to make as many gains. A comparison of the preintervention FSFI total scores bears this hypothesis out; women in the Brotto et al. study indicated higher levels of distress than those found in this study (M = 17.20 vs. M = 22.72, respectively). Nevertheless, both samples started the intervention under the cutoff score (26.55) that Wiegel et al. (2005) established to indicate Diagnostic and Statistical Manual of Mental Disorders-defined sexual dysfunction. By the end of this study, participants' scores were in the nondysfunctional range (M = 29.41), whereas those in the Brotto et al. study remained in the dysfunctional range (M =19.20). It is unclear whether those in the Brotto et al. study did not make the same extent of gains as the women in this study due to higher levels of initial distress, or due to the differential effectiveness of the interventions.

Table 2

Summary	Table fo	or the Effe	ts of Time	on Eight	Dependent	Variables	in the	Intervention C	Group
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	Pretest		Pos	Posttest		veek w-up	95% confidence intervals			
Measure	М	SD	М	SD	М	SD	Pre- to Post	Post- to follow-up	Pre- to follow-up	
HISD***	27.96	10.19	48.93	10.28	45.33	16.85	[-29.36, -12.60]***	[-5.70, 12.90]	[-28.77, -5.99]**	
Desire**	2.00	0.52	3.53	1.06	3.40	1.16	$[-2.34,67]^{**}$	[71, .97]	$[-2.20,60]^{**}$	
Total*	24.04	5.08	29.46	2.62	29.50	3.84	$[-10.06,76]^*$	[-2.47, 2.38]	[-9.44, -1.48]*	
Arousal	3.77	1.55	4.90	0.96	4.70	1.27	[-2.46, .19]	[75, 1.15]	[-1.93, .06]	
Lub	4.57	1.56	5.33	0.67	5.53	0.48	[-1.90, .36]	[54, .14]	[-2.32, .39]	
Org	4.58	1.64	5.11	1.02	5.16	1.19	[-1.56, .49]	[51, .43]	[-1.46, .30]	
Pain	4.93	1.41	5.87	0.40	5.78	0.45	[-2.12, .26]	[18, .36]	[-2.04, .35]	
Sat	4.20	0.93	4.71	0.56	4.93	0.82	[-1.59, .57]	[-1.10, .66]	[-1.42,05]	

Note. N = 9 for all analyses. For all measures, higher scores indicate higher level aspects of sexual functioning. Significance levels next to scale name pertain to repeated measures ANOVAs; significance levels in confidence intervals pertain to pairwise comparisons. HISD = Hurlbert Index of Sexual Desire (range = 0–100); Desire = Female Sexual Functioning Index Desire subscale (range = 1.2–6); Total = Female Sexual Functioning Index Total Score (range = 2–36); Arousal = Female Sexual Functioning Index Arousal subscale (range = 0–6); Lub = Female Sexual Functioning Index Lubrication subscale (range = 0–6); Org = Female Sexual Functioning Index Orgasm subscale (range = 0–6); Sat = Female Sexual Functioning Index Satisfaction subscale (range = 0–6); Pain = Female Sexual Functioning Index Pain subscale (range = 0–6). * $p \le .05$. ** $p \le .01$.

A future study should compare the effectiveness of Brotto and colleagues' (2008) intervention with reading "A Tired Woman's Guide to Passionate Sex" (Mintz, 2009). Past studies comparing bibliotherapy and face-to-face treatment for other sexual concerns have led to the conclusion that "face-to-face counseling is certainly not always superior" (van Lankveld, 2009, p. 150). Whether this is true for the treatment of low sexual desire is an empirical question warranting investigation.

Several other questions deserve investigation. In light of the present medicalization of sexual dysfunctions (Heiman, 2008), studies should compare the effectiveness of this book with pharmacological agents. Another fruitful avenue is comparing the efficacy of this book with another self-help book on the topic (e.g., Hall, 2004). A study using a placebo control group, rather than a WLC group, would be useful in determining whether it is the specific intervention that is effective or whether the effect is simply the result of doing something to help oneself. A study comparing the effectiveness of reading this book with or without accompanying minimal therapist support is also worthy of investigation. It would be expected that pairing this book with therapist support would yield even better results than reading the book unassisted (van Lankveld, 2009). A dismantling study would help ascertain which chapters, or treatment steps, most contributed to the book's efficacy. Likewise, collecting qualitative data on women's reactions to this book could assist in guiding future interventions. Finally, although we could locate no self-help books on low sexual desire written either for a more inclusive female audience or for an exclusively lesbian audience, locating and examining the efficacy of such books would be a welcome addition to the literature. Certainly, creating and examining such self-help interventions would also be an important endeavor.

Although this study adds to the body of research suggesting that bibliotherapy is an effective treatment for sexual dysfunction and provides what appears to be the first test of bibliotherapy for low sexual desire, it suffered from methodological shortcomings. First, as is the case with most bibliotherapy studies, the sample size was small (van Lankveld, 2009), especially in the follow-up study. Although statistically significant results and large effect sizes were found, generalizability is questionable given this small sample's lack of racial/ethnic and religious diversity, as well as the sample being composed almost exclusively of employed, married midwestern women self-reporting marital satisfaction. Whether the intervention would be effective for other women, including those reporting marital discord, is unclear. Another methodological shortcoming is the large (28.6%) posttest attrition rate in the intervention group. Albeit similar to the 30%-35% intervention group attrition rate found in other studies of bibliotherapy (e.g., Floyd, Scogin, McKendree-Smith, Floyd, & Rokke, 2004; Malouff, Noble, Schutte, & Bhullar, 2010) and nearly identical to the 28.9% rate found in a study on bibliotherapy for life-long vaginismus (van Lankveld et al., 2006), and whereas a 30% dropout rate is not unusual for treatment studies (Elkin, 1994), attempts should still be made to diminish these rates. Future studies would benefit from providing an incentive for those in the intervention group to take the posttest measures. Likewise, although the average book completion rate was greater than those found in other recent bibliotherapy studies in which such data are reported (e.g., Floyd et al., 2004; Malouff et al., 2010), future work should examine what participant characteristics predict the highest

compliance rates (Mahalik & Kivlighan, 1988). Another weakness future studies should remedy was the lack of inclusion of valid stress or marital satisfaction measures; in this study, participants were recruited on the basis of self-identification related to both, yet psychometrically sound instruments measuring these variables were not used. Future studies including such measures could contribute to an understanding of the efficacy of this intervention; scores could be used as either covariates or outcome variables, depending on the question under study.

Despite the need for additional study, clinicians can now feel comfortable recommending this intervention to self-identified heterosexual female clients. Clinicians could use this book as an adjunct to face-to-face treatment, tailoring treatment around the chapters in the book. Also, as recommended by Norcross (2006), clinicians could recommend this book during waiting periods, prior to face-to-face treatment, and to facilitate maintenance of treatment gains after professional services have concluded. Clinicians could also recommend this book prior to treatment beginning, with treatment provided only if the intervention did not yield desired changes. This approach would be consistent with Annon's (1974) view that most individuals are able to resolve sexual difficulties without therapy. Although Annon's tiered approach to resolving sexual concerns has been in existence for over 35 years, it is particularly relevant in an era in which treatment for sexual dysfunctions is often not covered by insurance companies.

It is hoped this study will spawn additional research. Whether sexual functioning and self-help materials are studied separately (e.g., sexual satisfaction among gay men; bibliotherapy for career indecision) or in combination, as in this study, we hope this research serves to bring two presently understudied topics—selfhelp and sexual functioning—to the forefront of counseling psychology.

References

- Annon, J. S. (1974). *Behavioral treatment of sexual problems*. Honolulu, HI: Enabling Systems.
- Apt, C., & Hurlbert, D. F. (1992). Motherhood and female sexuality beyond one year postpartum: A study of military wives. *Journal of Sex Education and Therapy*, 18, 104–114.
- Balon, R. (2008). The DSM criteria of sexual dysfunction: Need for a change. *Journal of Sex and Marital Therapy*, 34, 186–197. doi:10.1080/ 00926230701866067
- Basson, R. (2000). The female sexual response: A different model. *Journal* of Sex & Marital Therapy, 26, 51–65. doi:10.1080/009262300278641
- Basson, R. (2007). Sexual desire/arousal disorders in women. In S. R. Leiblum (Ed.), *Principles and practice of sex therapy* (4th ed., pp. 25–53). New York, NY: Guilford Press.
- Basson, R., Leiblum, S., Brotto, L., Derogatis, L., Fourcroy, J., Fugl-Meyer, K., . . . Schultz, W. W. (2003). Definitions of women's sexual dysfunction reconsidered: Advocating expansion and revision. *Journal* of Psychosomatic Obstetrics and Gynecology, 24, 221–229. doi: 10.3109/01674820309074686
- Beck, J. G. (1995). Hypoactive sexual desire disorder: An overview. Journal of Consulting and Clinical Psychology, 63, 919–927. doi: 10.1037/0022-006X.63.6.919
- Bodenmann, G., Ledermann, T., Blattner, D., & Galluzzo, C. (2006). Associations among everyday stress, critical life events and sexual problems. *Journal of Nervous and Mental Disease*, 194, 494–501. doi:10.1097/01.nmd.0000228504.15569.b6
- Brotto, L., Basson, R., & Luria, M. (2008). A mindfulness-based group

psychoeducational intervention targeting sexual arousal disorder in women. *Journal of Sexual Medicine*, *5*, 1646–1659. doi:10.1111/j.1743-6109.2008.00850.x

- Catania, J., Pollack, L., McDermott, L., Qualls, S., & Cole, L. (1990). Help-seeking behaviors of people with sexual problems. *Archives of Sexual Behavior*, 19, 235–250. doi:10.1007/BF01541549
- Chang, T. (2005). Online counseling: Prioritizing psychoeducation, selfhelp, and mutual help for counseling psychology research and practice. *The Counseling Psychologist*, 33, 881–890. doi:10.1177/ 0011000005279962
- Consumer Reports National Research Center. (2009, February 9). Health poll: Eighty percent of sexually active Americans put off sex because they're too sick or tired. Retrieved from http:// pressroom.consumerreports.org/pressroom/2009/02/consumer-reportshealth-poll-80-of-sexually-active-americans-put-off-sex-becausetheyre-too-sick-or-.html
- Elkin, I. (1994). The NIMH treatment of depression collaborative research program: Where we began and where we are. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed., pp. 114–139). New York, NY: John Wiley.
- Enders, C. K. (2003). Performing multivariate group comparisons following a statistically significant MANOVA. *Measurement and Evaluation in Counseling and Development*, *36*, 40–56.
- Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice*, 40, 532– 538. doi:0.1037/a0015808
- Floyd, M., Scogin, F., McKendree-Smith, N. L., Floyd, D. L., & Rokke, P. D. (2004). Cognitive therapy for depression: A comparison of individual psychotherapy and bibliotherapy for depressed older adults. *Behavior Modification*, 28, 297–318. doi:10.1177/0145445503259284
- Gould, R. A., & Clum, G. A. (1993). A meta-analysis of self-help treatment approaches. *Clinical Psychology Review*, 13, 169–186. doi:10.1016/ 0272-7358(93)90039-O
- Hall, K. (2004). Reclaiming your sexual self: How you can bring desire back into your life. New York, NY: Wiley.
- Heiman, J. R. (2002). Psychologic treatments for female sexual dysfunction: Are they effective and do we need them? Archives of Sexual Behavior, 31, 445–450. doi:10.1023/A:1019848310142
- Heiman, J. (2008). Treating low sexual desire—New findings for testosterone in women. *The New England Journal of Medicine*, 359, 2047– 2049. doi:10.1056/NEJMe0807808
- Holm, S. (1979). A simple sequentially rejective multiple test procedure. Scandinavian Journal of Statistics, 6, 65–70.
- Huberty, C. J., & Morris, J. D. (1989). Multivariate analysis versus multiple univariate analyses. *Psychological Bulletin*, 105, 302–308. doi: 10.1037/0033-2909.105.2.302
- Hubin, A., DeSutter, P., & Reynaert, C. (2011). Bibliotherapy: An effective therapeutic tool for female sexual dysfunction. *Sexologies*, 20, 88–93. doi:10.1016/j.sexol.2010.06.001
- Hurlbert, D. F. (1993). A comparative study using orgasm consistency training in the treatment of women reporting hypoactive sexual desire. *Journal of Sex & Marital Therapy*, 19, 41–55. doi:10.1080/ 00926239308404887
- Jaccard, J., & Guilamo-Ramos, V. (2002). Analysis of variance frameworks in clinical child and adolescent psychology: Issues and recommendations. *Journal of Clinical Child and Adolescent Psychology*, 31, 130–146. doi:10.1207/S15374424JCCP3101_15
- Laumann, E., Michael, R. T., & Kolata, G. (1995). Sex in America: A definitive survey. Chicago, IL: Grand Central Publishing.
- Laumann, E., Paik, A., & Rosen, R. C. (1999). Sexual dysfunction in the United States. *Journal of the American Medical Association*, 281, 537– 544. doi:10.1001/jama.281.6.537

Mahalik, J. R., & Kivlighan, D. M. (1988). Self-help treatment for depres-

sion: Who succeeds? *Journal of Counseling Psychology*, *35*, 237–242. doi:10.1037/0022-0167.35.3.237

- Malouff, J. M., Noble, W., Schutte, N. S., & Bhullar, N. (2010). The effectiveness of bibliotherapy in alleviating tinnitus-related distress. *Journal of Psychosomatic Research*, 68, 245–251. doi:10.1016/ j.jpsychores.2009.07.023
- Marrs, R. W. (1995). A meta-analysis of bibliotherapy studies. American Journal of Community Psychology, 23, 843–870. doi:10.1007/ BF02507018
- McKendree-Smith, N. L., Floyd, M., & Scogin, F. R. (2003). Selfadministered treatments for depression: A review. *Journal of Clinical Psychology*, 59, 275–288. doi:10.1002/jclp.10129
- Meyer-Bahlburg, H., & Dolezal, C. (2007). The female sexual function index: A methodological critique and suggestions for improvement. *Journal of Sex and Marital Therapy*, 33, 217–224. doi:10.1080/ 00926230701267852
- Mintz, L. B. (2009). A tired woman's guide to passionate sex: Reclaim your desire and reignite your relationship. Avon, MA: Adams Media.
- Morokoff, P. J., & LoPiccolo, J. (1986). A comparative evaluation of minimal therapist contact and 15-session treatment for female orgasmic dysfunction. *Journal of Consulting and Clinical Psychology*, 54, 294– 300. doi:10.1037/0022-006X.54.3.294
- Norcross, J. C. (2006). Integrating self-help into psychotherapy: 16 practical suggestions. *Professional Psychology: Research and Practice*, 37, 683–693. doi:10.1037/0735-7028.37.6.683
- Rosen, G. M. (2004). Remembering the 1978 and 1990 task forces on self-help therapies. *Journal of Clinical Psychology*, 60, 111–113. doi: 10.1002/jclp.10230
- Rosen, R., Brown, C., Heiman, J., Leiblum, S., Meston, C., Shabsigh, R., ... D'Agostino, R., Jr. (2000). The female sexual function index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. *Journal of Sex and Marital Therapy*, 26, 191–208. doi:10.1080/009262300278597
- Rosen, R., Shifren, J., Monz, B., Odom, D., Russo, P., & Johannes, C. (2009). Correlates of sexually related personal distress in women with low sexual desire. *Journal of Sexual Medicine*, *6*, 1549–1560. doi: 10.1111/j.1743-6109.2009.01252.x
- Schnarch, D. (2000). Desire problems: A systemic perspective. In S. Leiblum & R. Rosen (Eds.), *Principles and practices of sex therapy* (3rd ed., pp. 17–56). New York, NY: Guilford Press.
- Shifren, J. L., Monz, B. U., Russo, P. A., Segreti, A., & Johannes, C. B. (2008). Sexual problems and distress in United States women: Prevalence and correlates. *Obstetrics and Gynecology*, *112*, 970–978. doi: 10.1097/AOG.0b013e3181898cdb
- Sink, C., & Stroh, H. (2006). Practical significance: The use of effect sizes in school counseling research. *Professional School Counseling*, 9, 401– 411.
- Trudel, G., Landry, L., & Larose, Y. (1997). Low sexual desire: The role of anxiety, depression and marital adjustment. *Sexual and Marital Therapy*, *12*, 109–113. doi:10.1080/02674659708408204
- Trudel, G., Marchand, A., Ravart, M., Aubin, S., Turgeon, L., & Fortier, P. (2001). The effect of a cognitive-behavioral group treatment program on hypoactive sexual desire in women. *Sexual and Relationship Therapy*, *16*, 145–164. doi:10.1080/14681990120040078
- Ullery, E. K., Millner, V. S., & Willingham, H. A. (2002). The emergent care and treatment of women with hypoactive sexual desire disorder. *The Family Journal: Counseling and Therapy for Couples and Families, 10,* 346–350. doi:10.1177/10680702010003013
- van Lankveld, J. (1998). Bibliotherapy in the treatment of sexual dysfunctions: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 66, 702–708. doi:10.1037/0022-006X.66.4.702
- van Lankveld, J. (2009). Self-help for sexual dysfunction. *Journal of Sex Research*, 46, 143–155. doi:10.1080/00224490902747776
- van Lankveld, J. J. D. M., ter Kuile, M. M., de Groot, H. E., Melles, R.,

Nefs, J., & Zandbergen, M. (2006). Cognitive–behavioral therapy for women with lifelong vaginismus: A randomized waiting-list controlled trial of efficacy. *Journal of Consulting and Clinical Psychology*, *74*, 168–178. doi:10.1037/0022-006X.74.1.168

- Weiderman, M. W., & Sansone, R. A. (1999). Sexuality training for professional psychologists: A national survey of training directors of doctoral programs and predoctoral internships. *Professional Psychology: Research and Practice*, 30, 312–317. doi:10.1037/0735-7028.30.3.312
- West, S. L., D'Aloisio, A. A., Agans, R. P., Kalsbeek, W. D., Borisov, N. N., & Thorp, J. M. (2008). Prevalence of low sexual desire and hypoactive sexual desire disorder in a nationally representative sample of US women. *Archives of Internal Medicine*, 168, 1441–1449. doi: 10.1001/archinte.168.13.1441
- Westheimer, R. (2007). *No sex in health insurance*. Retrieved from http:// www.forbes.com/2007/11/05/dr-ruth-insurance-oped-cx_drw_1106 drruth.html
- Wiegel, M., Meston, C., Rosen, R. (2005). The Female Sexual Function Index (FSFI): Cross-validation and development of clinical cutoff scores. *Journal of Sex & Marital Therapy*, 31, 1–20. doi:10.1080/ 00926230590475206

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