Effectiveness of a bibliotherapy intervention for young adult women’s sexual functioning

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To cite this article: Juliana Guitelman, Elizabeth A. Mahar, Laurie B. Mintz & Hope E. Dodd (2019): Effectiveness of a bibliotherapy intervention for young adult women’s sexual functioning, Sexual and Relationship Therapy, DOI: 10.1080/14681994.2019.1660761

To link to this article: https://doi.org/10.1080/14681994.2019.1660761

Published online: 05 Sep 2019.

Article views: 13

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Effectiveness of a bibliotherapy intervention for young adult women’s sexual functioning

Juliana Guitelman, Elizabeth A. Mahar, Laurie B. Mintz and Hope E. Dodd

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ABSTRACT
This study examined the effectiveness of a bibliotherapy intervention (i.e., the reading of a book) among 50 women randomized to read the book (intervention group) or wait to receive the book (wait-list control group). The book examined was “Becoming Cliterate” (Mintz, 2017) which combines feminist analysis and self-help for women’s orgasm difficulties. To examine intervention effectiveness, within group standardized effect sizes with confidence limits were used. In the intervention group, small to large pretest to posttest effect sizes were found for two measures of orgasm, attitudes toward women’s genitals, sexual-body esteem, self-efficacy in achieving sexual pleasure, arousal, sexual satisfaction, sexual pain, sexual assertiveness, and overall sexual functioning. A small effect size for one of the two orgasm measures was found among the control group. Implications are discussed.

ARTICLE HISTORY
Received 29 October 2018
Accepted 16 August 2019

KEYWORDS
Bibliotherapy; self-help; orgasm; female

Several studies have reported that young adult women are having difficulty reaching orgasm during sexual encounters with men. Young men are having substantially fewer problems with orgasm, resulting in what has been called an orgasm gap (Wade, Kremer, & Brown, 2005). Wade et al. (2005) reported that among about 800 undergraduate students, 91% of the males versus 39% of the females reported “always” or “usually” experiencing orgasm with a partner. While Wade et al. (2005) did not specify the context of the sexual encounter, Armstrong, England, and Fogarty (2012) reported that among 12,295 undergraduates from 17 different universities, 31% of men and 68% of women reported reaching orgasm during their last sexual encounter that occurred in the context of a committed sexual relationship. In short, there is a gendered orgasm gap occurring in heterosexual sexual encounters that is highest in casual sex and which decreases—but is not altogether eliminated—in relationship sex.

Another orgasm gap reported in the literature is one based on sexual orientation. Two studies reported that lesbian women had a significantly higher rate of orgasm during partnered sex than either bisexual or heterosexual women (Frederick, John,
Garcia, & Lloyd, 2018; Garcia, Lloyd, Wallen, & Fisher, 2014). Another study found that women in same-sex and mixed sex relationships are similar in terms of frequency of and satisfaction derived from orgasm through self-stimulation (Blair, Cappell, & Pukall, 2018). These findings, taken together with the gendered orgasm gap, indicates that there are sociocultural factors related to the low frequency of orgasm in the young adult female population—and that these sociocultural factors are especially pertinent for young women who have sex with young men.

Several sociocultural barriers result in low orgasm rates among young women during heterosexual sexual encounters, including: a) lack of knowledge of female sexual functioning (Wade et al., 2005); b) lack of skills in sexual communication and sexual assertion (Armstrong et al., 2012; Salisbury & Fisher, 2014); c) a societal sexual scripts that prioritize penile-vaginal intercourse (i.e., men’s most reliable route to orgasm) over clitoral stimulation (i.e., women’s most reliable route to orgasm) (Jannini et al., 2012; Muehlenhard & Shippee, 2010; Wade et al., 2005) and positions “men as assertive sexual agents and women as passive sexual recipients” (Chadwick & Anders, 2017, p. 1150); d) societal scripts that result in young women feeling less entitled to orgasm than young men (Horne & Zimmer-Gembeck, 2005); e) women’s cognitive distraction due to negative body image and performance anxiety (Meana & Nunnink, 2006; Sanchez & Kiefer, 2007); and f) women’s genital self-consciousness (Algars et al., 2011).

A lack of knowledge of female sexual anatomy and response may contribute to the high prevalence of anorgasmia among young women. Importantly, research suggests that direct clitoral stimulation (either alone or during intercourse) is predictive of orgasms among women (Jannini et al., 2012; Mintz, 2017). Thus, accurate clitoral knowledge would be expected to be predictive of orgasm rates. Yet, Wade et al. (2005) found that women’s knowledge of the clitoris was related to orgasm during masturbation, but not during partnered sexual encounters. Thus, while lack of clitoral knowledge is related to young women’s difficulties with orgasm when engaging in partnered sex, this factor alone does not fully explain women’s difficulty in orgasming during heterosexual sexual encounters.

Wade et al. (2005) theorized that women’s hesitation to communicate their need for clitoral stimulation to male partners was related to women’s difficulty with orgasm in partnered sexual situations. Indeed, Salisbury and Fisher (2014) found that women reported that they hesitate to ask for clitoral stimulation for fear of hurting their male partners’ feelings. Nevertheless, in this same study, male participants considered this type of assertion arousing (Salisbury & Fisher, 2014). Thus, providing women with both this knowledge regarding male partners’ reactions to assertions for clitoral stimulation and sexual communication skills could enable more women to reach orgasm.

While sexual assertion and communication may be helpful in closing the orgasm gap, some theorists propose that individual skill training may not be sufficient since the orgasm gap is a symptom of a societal script that emphasizes penile-vaginal intercourse as the ultimate sexual act, during which men are responsible for providing women with orgasms. Indeed, one recent study (Chadwick & Anders, 2017) found that men view women’s orgasms during sex as an achievement. Given that the vast
majority of women need clitoral stimulation to reach orgasm, setting up intercourse as the ultimate sexual act and women’s intercourse-based orgasms as reflection of their male partner’s achievement clearly contributes to the orgasm gap, and is no doubt related to the finding that over 60% of women report faking orgasm during intercourse, with a top reason for faking being to protect their male partners’ egos (Muehlenhard & Shippee, 2010). Additionally, this societal script which positions “men as assertive sexual agents and women as passive sexual recipients” (Chadwick & Anders, 2017, p. 1150) contributes to women feeling less entitled to orgasm than men, particularly during heterosexual encounters that include intercourse. Some evidence indicates that this lack of feeling entitled to orgasm is especially pronounced during causal sexual encounters (Armstrong et al., 2012).

Other evidence suggests a woman’s difficulty orgasming may be a consequence of women’s cognitive distraction during sexual encounters (Meana & Nunnink, 2006). Interestingly, studies have found that lesbian women have higher levels of cognitive distraction than heterosexual women (Lacefield & Negy, 2012), yet that this distraction affects heterosexual women’s sexual functioning more than lesbian women’s functioning (Beaber & Werner, 2009). Findings regarding the role of cognitive distraction on sexual functioning is consistent with the theory of objectified body consciousness (Roberts & Fredrickson, 2007), which states that due to unrealistic societal images, women come to take an “observer view” of their own bodies and that this observer view leads to body self-consciousness, which leads to problems such as poor body image, eating disorders, and decreased sexual functioning. Directly supporting this theory, negative body image is predictive of sexual self-consciousness which, in turn, is predictive of less sexual pleasure (Kiefer & Sanchez, 2007). Clearly, then, an intervention that includes a focus on decreasing body self-consciousness during sexual encounters might be effective in increasing female orgasm frequency. One such intervention is mindfulness, which indeed is supported by research as effective in enhancing sexual functioning (Brotto, Basson, & Luria, 2008a; Brotto et al., 2008b).

One particular area of body self-consciousness that has been a focus of recent attention is genital shame. Specifically, researchers have begun to focus on the high rates of genital shame and self-consciousness among young women (Mintz, 2017). Additionally, genital shame may be a consequence of exposure to the surgically or digitally altered images of female genitalia found in pornographic media. One study of 97 women found that those who were exposed to images of surgically modified genitalia rated altered images as more normal than natural genitalia, while those who were not exposed to surgically altered images were 18% less likely to rate the modified vulvas as normal (Moran & Lee, 2014). This study provides initial evidence that women exposed to false images of women’s genitals may perceive real vulvas—including their own—as abnormal. This finding may also help to further underscore why women who have sexual encounters exclusively with men have fewer orgasms than those who have sex with women. Specifically, women who have sex with other women would be exposed to a greater range of natural genitalia, thereby seeing their own as more normative, whereas women who only have sex with men would not have such exposure and instead, may only have exposure to false images of female genitalia and may therefore have less satisfaction with their own genital appearance.
Since women’s level of satisfaction with their genitals is associated with better sexual function (Algars et al., 2011), it stands to reason that an intervention exposing women who only have sexual encounters with men to realistic images of genitalia might lead to improved sexual functioning (e.g., improvement in orgasm rates).

**Bibliotherapy as an intervention for women’s improved sexual functioning**

One type of intervention that may hold particular promise for enhancing young adult women’s positive sexuality is bibliotherapy (i.e., the use of written materials to treat psychological or sexual concerns). Two meta-analyses (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 meta-analysis focusing exclusively on bibliotherapy for sexual dysfunction, including 12 studies, found an average effect size (Cohen’s d) of .68 compared with no-treatment groups (van Lankveld, 1998). Of particular relevance for the current study, the majority of the studies included (i.e., 7 of 12 studies) focused on orgasm problems among women. While it may thus be concluded that bibliotherapy is effective for female orgasm problems, this does not eliminate the need for further study, especially when considering that all of the studies in the meta-analysis were conducted between 1975 and 1988. In other words, the most recent study examining the effectiveness of bibliotherapy for anorgasmia among women was conducted about 30 years ago.

Clearly, the cultural landscape has changed considerably for young women in the last 30 years and in fact, some of the sociocultural reasons for young heterosexual women’s current problems with orgasm (e.g., genital shame due to pornographic images) are unique to the current generation of young adult women. Indeed, the intervention itself (i.e., the book under study) specifically points out that the entire body of knowledge regarding the importance of the clitoris to women’s orgasms that was known to the generation of women who grew up with such books as “Our Bodies, Ourselves” (Boston Women’s Health Book Collective, 1973) has been lost to younger generations of women—replaced by widespread false images in pornography of women having fast and fabulous orgasms from intercourse alone. Therefore, while prior studies provide evidence that bibliotherapy is an effective intervention for orgasm concerns, a study of a bibliotherapy intervention for the current generation of women would be an important contribution to the literature.

**Current study**

This study will investigate the efficacy of the book *Becoming Cliterate* (2017) for improving young adult women’s sexual well-being. As described below (see intervention section), this book is specifically written to improve young adult women’s sexual well-being by both providing clitoral knowledge and by targeting the sociocultural barriers detailed above. Accordingly, this study used a pretest–posttest randomized
waitlist control (WLC) group design to determine if, as compared to college women in the wait-list group, college women randomized to read *Becoming Cliterate* over a 4-week period experience gains in self-report measures of attitudes toward women’s genitals, orgasm, sexual assertiveness, specific domains of sexual functioning (e.g., satisfaction, pain, arousal), overall sexual-functioning, and sexual subjectivity, which includes sexual body-self-esteem, feelings of entitlement of pleasure from self, feelings of entitlement to pleasure from a partner, self-efficacy in achieving sexual pleasure, and sexual self-reflection. The study also examined maintenance of gains among those who read the book. The aforementioned variables were chosen based on their theoretical relevance, as detailed above, to orgasm concerns among this generation of women; these variables also correspond to the intervention provided in the book given that it was written to intervene with such orgasm concerns. Additionally, college women were recruited as this age group falls within the target audience of the intervention and those who the majority of research on the orgasm gap has been conducted with.

**Method**

**Power and participants**

Seventy college students, recruited across five data collection waves, completed the pretest measures and were assigned to either the intervention or wait-list control group, with 35 assigned to each group. Thirty of the 35 participants in the wait-list group completed the posttest measures (attrition rate = 14%) and 27 of the 35 participants in the intervention group completed the posttest measures (attrition rate = 23%). All participants in the intervention group who completed the posttest measures also completed the follow-up measures. Of the 27 intervention group participants, seven reported not finishing the active intervention section of the book (i.e., see description of intervention below) and, thus, there were a total of 50 participants who completed both pre- and posttest assessments and who were included in the final sample. See Figure 1 for the flow of participants throughout the study. *A priori* power analyses revealed that 42 participants at posttest and 34 at follow-up would be needed to obtain a medium effect size at a power of .80.

Among those in the final sample, ages ranged from 18 to 26 (*M* = 20.04, *SD* = 2.02). There were 13 first-year students (26%), 14 second-year students (28%), nine third-year students (18%), eight fourth-year students (16%), two fifth-years students (4%), and four graduate students (8%). All participants identified as women. In regards to sexual orientation, students identified as follows: 28 exclusively heterosexual (56%); 15 mostly heterosexual (30%); five bisexual (10%); and two participants who identified as pansexual (4%). In terms of race and ethnicity, students identified as follows: 27 White/European American/Caucasian (54%), eight Asian American/Pacific Islander (16%), six Hispanic/Latin American (12%), six Biracial/Multiracial (12%), and three African/African American/Black (6%). Regarding current social class, participants identified as follows: 24 middle class (48%), 13 working class (26%), 10 upper middle class (20%), one lower class (2%), and two identified as “other” (4%). Finally, participants identified their religion as follows: 17 Christian
Figure 1. Flowchart of participants in the intervention condition and control condition throughout the study.
(34%), 11 Agnostic (22%), six Atheist (12%), two Jewish (4%), two Buddhist (4%), one Muslim (2%), and additionally, eight participants identified as having no religion (16%), and three participants who identified as “other” religion (6%).

 Measures

 Demographic questionnaire
All participants completed a 12-item demographic questionnaire that included questions regarding participant’s: a) age; b) sex; c) gender identity; d) race/ethnicity; e) sexual orientation; f) education level; g) current social class; h) family social class; i) religion; j) height; k) weight. There was also an option for participants to self-identify under an “other” option for any of the above questions.

 Attitudes toward women’s genitals
The Attitudes Toward Women’s Genitals scale (ATWGS; Herbenick, 2010) was used to assess how participants view women’s genitals. On this 10-item scale, individual items are rated on a 4-point Likert-type scale, ranging from 1 (strongly disagree) to 4 (strongly agree). Scores range from 10 to 40, with higher scores reflecting more positive attitudes toward female genitalia. The Cronbach’s alpha for the 10-item scale was .85 for female participants and .82 for male participants. Internal consistency in this study was $\alpha = .85$ at pretest, $\alpha = .89$ at posttest, and $\alpha = .82$ at follow-up.

 Female sexual subjectivity index
The Female Sexual Subjectivity Index (Horne & Zimmer-Gembeck, 2006) was used to measure five aspects of participants’ positive sexuality. Specifically, this measure includes five subscales which measure: a) entitlement to pleasure from self; b) entitlement to pleasure from a partner; c) feelings of efficacy in achieving sexual pleasure; d) sexual self-reflection; and e) body self-esteem. For this 20-item scale, individual items are rated on a 5-point Likert-type scale, ranging from 1 (not at all true of me) to 5 (very true of me), with higher scores reflect more sex positive attitudes for that dimension. Internal consistencies of the subscales range from .77 to .87 (Horne & Zimmer-Gembeck, 2006). Internal consistencies ($\alpha$) for the FSSI in this study was as follows for pretest, posttest, and follow-up, respectively: entitlement to pleasure from self (.75, .66, .32), entitlement to pleasure from a partner (.80, .84, .54), feelings of efficacy in achieving sexual pleasure (.77, .84, .85), sexual self-reflection (.73, .89, .72), and body self-esteem (.85, .87, .89).

 Female orgasm scale
The Female Orgasm Scale (FOS; McIntyre-Smith & Fisher, 2010) was used to assess women’s reports of their orgasms with a partner. The first five items on the scale are scored on an 11-point scale that assesses the frequency of orgasm during different sexual activities with a partner (i.e., oral sex, manual self-stimulation of genitals, manual partner-stimulation of genitals, vaginal penetration without clitoral stimulation, and simultaneous direct clitoral stimulation and penetration). The last two items, which assess the overall satisfaction of orgasms with a partner, are scored on a 7-
point Likert-type scale, ranging from 1 (very unsatisfied) to 7 (very satisfied). Total scores on this seven-item scale range from 2.86 to 70, with higher scores indicating both more general satisfaction with orgasm and more orgasm frequency when having sexual relations with a partner. This scale also can be used to generate two subscale scores. The first is orgasm from clitoral stimulation, which includes four of the five items assessing the frequency of orgasm during different sexual activities with a partner (i.e., all but vaginal penetration without clitoral stimulation). The second subscale is satisfaction with orgasm, which includes the two items assessing satisfaction. In this study both the total score and both subscale scores were examined.

The scale has been shown to have an internal consistency of .86 and a 4-week test–retest reliability of $r=.82$ (McIntyre-Smith & Fisher, 2010). Internal consistencies ($z$) for the FOS in this study was as follows for pretest, posttest, and follow-up, respectively: overall FOS (.84, .82, .85), orgasm from clitoral stimulation (.73, .79, .90), satisfaction with orgasm (.93, .81, .63).

**Female sexual function index**
The Female Sexual Function Index (FSFI; Rosen et al., 2000) was used as a second measure of orgasm, as well as of five related aspects of sexual functioning (arousal, lubrication, desire, satisfaction, and pain). The following domain score ranges are derived from a scoring algorithm: Desire 1.2–6; Arousal 1.2–6; Lubrication 1.2–6; Orgasm 1.2–6; Satisfaction 1.2–6; and Pain 1.2–6. Additionally, domain scores are summed for an overall sexual functioning score, which can range from 7.2 to 36, with higher scores representing higher levels of sexual functioning. Responses of “No sexual activity” or “Did not attempt intercourse” were coded as missing data (Boehmer, Timm, Ozonoff, & Potter, 2012; Meyer-Bahlburg & Dolezal, 2007).

Rosen et al. (2000) reported 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 ($z=.97$) and the individual domains ($z=.89–.96$). Internal consistencies ($z$) for the FSFI in this study was as follows for pretest, posttest, and follow-up respectively: Overall Sexual Functioning (.91, .91, .87), Desire (.66, .77, .92), Arousal (.85, .85, .79), Lubrication (.91, .90, .90) Orgasm (.94, .93, .96), Satisfaction (.85, .91, .78), and Pain (.77, .80, .81).

**Hurlbert index of sexual assertiveness**
The Hurlbert Index of Sexual Assertiveness (HISA; Hurlbert, 1991) was used to measure the sexual assertiveness of the participants in relationship to sexual partners. For this 25-item scale, individual items are rated on a 5-point Likert-type scale, ranging from 0 (all of the time) to 4 (never). Higher scores represented greater sexual assertiveness, with the scale score ranging from zero to 100. In the current study, internal consistency was $z=.87$ at pretest, $z=.91$ at posttest, and $z=.91$ at follow-up.

**Procedure**
Campus institutional review board (IRB) approval was sought, including addressing conflict of interest issues. Specifically, as detailed in the IRB application, one of the
study authors is also the author of the book under investigation, and thus stands to benefit from book sales that result from a publication on the efficacy of the book. However, book royalties are extremely low, rending this conflict minimal. Also, previous bibliotherapy efficacy studies have been conducted by the authors of the books under investigation (e.g., Morokoff, & LoPiccolo, 1986), and book authors holding responsibility for assessing the effectiveness of their products is in line with scientific recommendations (McKendree-Smith et al., 2003). In this study, the book author was not involved in participant recruitment, data collection, or data analysis.

Sexually active female participants between the ages of 18 and 35 were recruited through flyers posted and distributed on a large Southern university campus. These flyers did not specifically recruit participants with sexual problems, but instead stated that researchers were seeking sexually active women who wish to improve their sexual well-being (e.g., arousal, satisfaction, orgasms, sexual communication). The flyer defined sexually active women as people with vaginas who are currently engaging in genital contact with a partner or partners, irrespective of relationship status. After viewing the flyer, those who were interested in participating contacted the researcher via email and received additional information about the study. If potential participants stated they wanted to participate, they were sent an initial email with the informed consent document to review and were told they would receive an email to begin participation within 3 weeks. After sufficient numbers of participants were recruited (but within 3 weeks of the first contact with a potential participant in each wave of the data collection), participants were sent an email containing a link to begin the study, which was hosted on Qualtrics. The demographic questionnaire was presented first and the rest of the measures were presented in a counterbalanced order.

After completing the pretest survey, participants were assigned to the intervention or control group, using the method of assigning every other person to each condition sequentially in order to achieve balanced groups. Those assigned to the intervention group were emailed book pick up instructions and a letter of instruction telling them to read the book within 4 weeks. Those in the wait-list control group were sent an email letter stating they would receive the book in 4 weeks after completing additional measures. A reminder email about remaining time was sent to all participants 2 weeks after providing the book or the email letter. Four weeks after picking up their book, participants in the intervention condition were sent a link to the posttest survey with the second set of questionnaires, which included the same measures as the first set of surveys, as well as a question asking if they had finished reading the book and, if not, asking what page number they read up to. At this same 4-week time point, wait-list control participants completed the second set of questionnaires (identical to the first set) and, upon completion, were told that they could pick up the book and were debriefed. Participants in the intervention group were reminded that in another 4 weeks, they would be asked to complete the measures one final time and were debriefed after completing these follow-up measures. Finally, because in other bibliotherapy studies, there was a higher attrition rate among the intervention group than the control group (i.e., because they have no incentive to continue participation after receiving the book), intervention group participants were also told (in both the
informed consent and reminder emails) that every 10th person completing the survey would be provided with a $20 Amazon gift card.

**Intervention**

*Becoming Cliterate* (Mintz, 2017) is a 288-page book that provides a combination of cultural/feminist analysis and self-help, with the stated goal of closing the cultural pleasure/orgasm gap and empowering women to orgasm. The book is divided into five sections (titled, “sextions”), with the first three sections considered to comprise the active intervention. These sections are: a) a three-chapter section providing information on the cultural problems underlying women’s difficulty reaching orgasm, particularly in heterosexual sexual encounters; b) a one-chapter section chapter providing detailed information regarding women’s sexual anatomy, as well as realistic images of female genitalia; c) a four-chapter section providing individual skills needed to orgasm; d) a two-chapter section with ideas and skills to help readers empower other women to orgasm and to continue their own sex-positive sexual education; and e) a one-chapter section written for men, summarizing all the prior information in the book. The third section (i.e., the section providing individual skills needed to orgasm) includes the following individual skill chapters: 1) a chapter focusing on cognitive techniques to deal with sex-negative attitudes (e.g., slut shaming) and negative body-image, as well as mindfulness-based techniques to counter cognitive distractions during sexual encounters; 2) a chapter providing instructions on guided-masturbation, a cornerstone of sex therapy for orgasm concerns; 3) a chapter providing new cultural scripts for sexual encounters; and finally, 4) a chapter providing general and sexual communication strategies and skills. In short, the book tackles all of the aforementioned sociocultural issues underlying young women’s difficulties with orgasm. This book was the recipient of the Society for Sex Therapy and Research 2019 Consumer Book Award, given to recognize the best recent book for consumers that contributes to the understanding of human sexuality and/or sexual problems and has been positively reviewed in a several professional journals including *Psychology of Women Quarterly* (Mollen & Abbott, 2018), PsycCRITIQUES (Martino, 2018), and the *Journal of Sex and Marital Therapy* (Nasserzadeh, 2018).

**Results**

**Preliminary analyses**

Analyses were conducted to examine differences in pretest outcome variables for participants who only took the pretest compared to those who completed both the pretest and the posttest. Individuals who completed only the pretest reported less pain at pretest ($M = 5.45$, $SD = 0.53$) than did participants who completed both the pretest and posttest ($M = 4.49$, $SD = 1.10$), $F(1, 55) = 9.08$, $p = .004$. Using chi-square tests with Monte Carlo simulations (95% confidence intervals) and Fisher’s exact tests, we found no demographic differences based on attrition and no difference in attrition based on group assigned ($ps > .05$). Analyses were also conducted to examine differences between the intervention and WLC group on outcome variables at pretest. No
differences were found (ps > .05). In cases of missing data, we used pairwise deletion. Cases affected are indicated in Table 1.

**Intervention effectiveness**

Because tests of significance can confound the size of the differences with the size of the sample (Turner & Bernard, 2006), recent recommendations are to present results of intervention studies exclusively in terms of effect sizes with confidence limits (Cumming, 2012; Kline, 2013). Indeed, compared to null hypothesis significance testing, standardized effect sizes with confidence limits: a) more directly answer questions about intervention effects; b) provide information about what is likely to happen on replication of an experiment; c) facilitate comparison; d) can be used in meta-analyses; e) tend to be intuitively more understandable; and f) provide information on practical significance (Cumming, 2012; Kline, 2013).

Effect sizes represent a simple way of quantifying the size of the difference between two groups, and thus for interventions studies can be defined as “… a standardized, scale-free measure of the relative size of the effect of an intervention” (Turner & Bernard, 2006, p. 42). Nevertheless, the effect size is still an estimate of an intervention’s effect in the population from which the sample is drawn and thus an effect calculated from a large sample may be more accurate than one calculated from a small sample. Thus, to “disentangle effect size and sample size” (Turner & Bernard, 2006, p. 44), confidence intervals for effect sizes can be used, as they represent the likely range of the true population mean effect size. If a 95% confidence interval does not include zero, the observed effect size can be concluded to not have been obtained by chance (Lakens, 2013; Turner & Bernard, 2006). Therefore, we present the data with Hedges’ $g$ effect sizes and confidence limits. Hedges’ $g$ effect size was chosen due to being less affected by sample size than the more commonly known Cohen’s $d$, as well as being the effect size recommended for use in meta-analyses (Turner & Bernard, 2006).

As recommended by Lakens (2013), we examine within group effect sizes with Hedges’ $g_{av}$ (correlation between pretest and posttest accounted for and denominator is average standard deviation). Hedges’ $g$ effect sizes can be interpreted with Cohen’s (1988) rule of thumb: $.20–.49 = small$, $.50–.79 = medium$, $.80$ and above = large, and we do so in the data presented below. Finally, we also report common language effect sizes, a percentage expressing “… the probability that a person from one group will have a higher observed measurement than a randomly sampled person from the other group” (Lakens, 2013, p. 4).

**Immediate effectiveness**

Table 1 presents the means, standard deviations, and within group pretest to posttest effect sizes with confidence limits for the two groups (i.e., intervention vs. WLC). To further facilitate group comparisons, Table 1 includes notations indicating the magnitude of the effect (i.e., no effect, small effect, medium effect, or large effect, using Cohen’s, 1988 conventions). Common language effect sizes are also presented.
Table 1. Within group effect sizes by group.

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<th>Pretest</th>
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<td>0.76**</td>
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As presented in Table 1, participants who read the book evidenced an increase in mean scores (that were unlikely to occur from chance) from pretest to posttest of a large magnitude on the Attitudes Toward Women’s Genitals scale (Hedges’ $g_{av}=0.82$) and the FSFI Total Score (Hedges’ $g_{av}=0.81$); of a medium magnitude on the FOS Satisfaction subscale (Hedges’ $g_{av}=0.69$), the FSFI Arousal subscale (Hedges’ $g_{av}=0.69$), the FSFI Pain subscale (Hedges’ $g_{av}=0.65$), the FSFI Satisfaction subscale (Hedges’ $g_{av}=0.64$), FSSI Self-Efficacy in Achieving Sexual Pleasure subscale (Hedges’ $g_{av}=0.51$); and of a small magnitude on FOS Total Score (Hedges’ $g_{av}=0.49$), the FSSI Sexual Body-Esteem subscale (Hedges’ $g_{av}=0.48$), the FSFI Orgasm subscale (Hedges’ $g_{av}=0.48$), and the Hurlbert Index of Sexual Assertiveness (Hedges’ $g_{av}=0.33$). Those who read the book also evidenced an increase in mean scores from pretest to posttest on all remaining measures although confidence intervals indicated that these results may have occurred by chance. Those in the WLC group (i.e., those who waited 4 weeks to receive the book) also evidenced an increase in the mean score unlikely to occur from chance of a small magnitude on the FOS Total Score (Hedges’ $g_{av}=0.24$).

**Longer term effectiveness**

To examine the longer-term effectiveness among those in the intervention group, we examined pretest to follow-up effect sizes. As can be seen in Table 1, participants who read the book showed an increase in mean scores (that were unlikely to occur from chance) from pretest to follow-up of a large magnitude on the FSFI Satisfaction subscale (Hedges’ $g_{av}=1.21$), the FSFI Total Score (Hedges’ $g_{av}=1.01$), and FSSI Self-Efficacy in Achieving Sexual Pleasure subscale (Hedges’ $g_{av}=0.86$); of a medium magnitude on the FSFI Arousal subscale (Hedges’ $g_{av}=0.79$), the FOS Satisfaction subscale (Hedges’ $g_{av}=0.77$), the Attitudes Toward Women’s Genitals scale (Hedges’ $g_{av}=0.76$), FOS Total Score (Hedges’ $g_{av}=0.74$), the Hurlbert Index of Sexual Assertiveness (Hedges’ $g_{av}=0.73$), the FSFI Pain subscale (Hedges’ $g_{av}=0.69$), the FSFI Orgasm subscale (Hedges’ $g_{av}=0.66$), the FOS Orgasm from Clitoral Stimulation subscale (Hedges’ $g_{av}=0.57$), and the FSSI Sexual Body-Esteem subscale (Hedges’ $g_{av}=0.52$).

**Discussion**

As far as we could determine, this is the first study in approximately 30 years to evaluate the effectiveness of a self-help book for issues surrounding women’s orgasm, as well as other related indicators of sexual well-being. We also believe this to be the first study to examine bibliotherapy for sexual well-being in a sample of young adult women. In line with predictions made at the outset of the study, participants who read the book evidenced positive change in several indices of sexual well-being from pretest to posttest (i.e., from before reading the book to after completion of the book) with effect sizes ranging from small to large. Participants who did not read the book also evidenced an increase in overall scores on the Female Orgasm Scale. In addition, participants who read the book evidenced an increase in sexual well-being from pretest to follow-up on a number of sexual well-being measures, again with effect sizes ranging from medium to large.
Based on the pretest to posttest changes in sexual well-being made among those reading the book as compared to those not reading the book, we conclude that the book was effective in enhancing sexual functioning. Nevertheless, a more detailed examination of precisely what changes were made and the possible connections between them is potentially important in understanding the effectiveness of the intervention in more detail. First, the book was written with the stated goal of closing the orgasm gap and increasing orgasmic capacity in young adult women, especially those who have sex with men, and indeed, both measures of orgasm evidenced a small change from pretest to posttest. However, unexpectedly, those in the wait-list control group also evidenced a small change in the FOS scale in this same time period. Nevertheless, in this same time period, among those in the intervention group, there was a change in satisfaction with orgasm not mirrored in the control group, as well as changes also not evident in the wait-list control group in attitudes toward women’s genitals, body-esteem, self-efficacy in achieving sexual pleasure, satisfaction, sexual pain, arousal, overall sexual functioning, and sexual assertiveness. It thus seems that the book helped the young women in this study become more comfortable with their own bodies and their own genitals, more assertive about their sexual needs and more confident in achieving sexual pleasure. These factors likely worked together to increase orgasm rates and satisfaction with orgasm. Additionally, since the book includes specific information on the fact that much painful sexual intercourse is due to initiating intercourse before sufficient arousal, participants in this study likely learned this information and applied it to their sexual encounters, thereby resulting in more arousal and less sexual pain. It is likely that all of these aforementioned changes are what accounted for the participants’ increase in overall sexual satisfaction and overall sexual functioning.

The finding that the book enhanced both body-esteem and positive attitudes toward women’s genitalia is noteworthy. As discussed earlier, genital shame among young women has increased, with research suggesting that genital shame may be a consequence of exposure to the surgically or digitally altered images of female genitalia found in pornographic media (Moran & Lee, 2014). Despite this, as far as we know, this is the first study to attempt to intervene with such shame and the fact that the intervention did so, is notable. Likewise, since body-image is known to be particularly resistant to change (Abbate-Daga, Amianto, Delsedime, De-Bacco, & Fassino, 2013), it is also significant that this intervention had a positive effect on this, alongside other changes including but not limited to changes in orgasm.

Indeed, given that the stated purpose of the book is to increase orgasm rates, it is important to discuss the changes in orgasm in the control group. Specifically, overall scores on the FOS increased for both the intervention and control groups. Before examining this question, it is important to note that while both groups evidenced changes in the small magnitude range (.20–.50), those in the control group were on the lower end of this range (.24) whereas those in the intervention group were in the high end (.49), indeed very close to the medium range. Still, the small change in the control group could be due to an increased focus on orgasm simply due to mere knowledge of the book’s title and anticipation of receiving this book at the end of the study. Indeed, this small change in the control group does not comprise evidence of
the book’s ineffectiveness but rather bodes for the possible effectiveness of simply drawing attention to women’s need for clitoral stimulation and the idea of orgasm equality.

More important, the conclusion that reading the book comprises an effective intervention was bolstered by examining changes in the intervention group from pretest to follow-up. The effect sizes for ten of the eleven changes in sexual well-being that were found at posttest increased at follow-up; the one that decreased (attitudes toward women’s genitals) still had a medium effect size (Hedges’ g_{av}=0.76). Of note, a medium effects size on the scale measure orgasm from clitoral stimulation was found at follow-up, but not at posttest. Thus, it appears that some changes in sexual well-being take more time and practice to implement, particularly those related to obtaining partnered clitoral stimulation.

Although the book can be considered to be effective on multiple indices, several indices that did not evidence change also deserve mention. Specifically, changes cannot be concluded to have been made at either posttest or follow-up among the intervention group on measures of desire, lubrication, entitlement to pleasure from a partner, entitlement to pleasure from oneself, or sexual self-reflection. Even more specifically, all of these effect sizes may have been obtained by chance. It is possible that this is due to the book being ineffective in making such changes or it may be that if a larger sample were obtained, these results would be more robust. This is a question for future research although we hypothesize that the intervention would not affect desire (i.e., it is not written at all for this concern), but that if there was a larger sample, changes would likely be found for lubrication, entitlement to pleasure from a partner, entitlement to pleasure from self, and sexual self-reflection. Still, this is an empirical question awaiting future study with a larger sample.

Indeed, the small sample size was one of several methodological limitations. As already noted, the sample size of the study was small (N= 50 at posttest), and the attrition rate in the intervention group was high (23%). While most bibliotherapy studies employ a similar sample size (van Lankveld, 2009), the sample size in this particular study was lower than planned for the follow-up group. Similarly, although the attrition rate in the intervention group in this study is lower than the 30% attrition rate found in most studies of this kind (Mintz, Balzer, Zhao, & Bush, 2012), this similarity does not render this limitation insignificant.

Another methodological issue is the lack of diversity within the sample, which limits the generalizability of this study. Most of the participants in the present study identified as White, Christian, highly educated, and middle social class. Furthermore, the study was limited in terms of geographical location, with recruitment solely occurring at one Southern university campus. A study with a more diverse sample is needed.

Of note, the internal consistencies of two of the subscales of the Female Sexual Subjectivity Index (entitlement to pleasure from self and entitlement to pleasure from a partner) are low (i.e., .32 and .54) at follow-up. A possible explanation for this is that because these subscales only have three and four items, respectively, the value of $\alpha$ may be reduced because $\alpha$ is strongly affected by scale length (Streiner, 2003). Furthermore, with low sample sizes, alpha coefficients can be unstable (Charter,
the sample size used to compute the internal consistencies for the follow-up scales was low (20 participants) in comparison to the sample size for the pre- and posttest scales (50 participants). An additional limitation is that the current study used the original wording of the FSFI instead of using Boehmer et al.'s (2012) rewording that makes the scale more inclusive of sexual minority women. We suggest that future studies use the modified FSFI.

A final important limitation of this study pertains to sexual orientation and sex of partners. First, the majority of participants in this study were heterosexual (either exclusively or mostly), with a minority identifying as bisexual or pansexual. Given that orgasm concerns are mostly prevalent in women who have sex with men, and that the intervention specifically targeted the issues underlying this problem (e.g., an over-focus on penetrative sex), it may have been better to limit our sample to only women who identified as heterosexual. Nevertheless, despite not doing this, there were no identified lesbians in the sample and among those that identified as non-heterosexual, all identified with a sexual orientation (i.e., bisexual or pansexual) which would include women who would presumably have sexual relations with both women and men. It may be that lesbian women did not enter our study (which specifically sought women who wished to improve their sexual well-being) because they were not having such sexual problems. Nevertheless, the sexual orientation which one identifies with does not necessarily correspond with the gender of the person one has sexual relationships with; in other words, people who identify as lesbian might also have sexual encounters with men and those who identify as heterosexual might also have sexual encounters with women (Reback & Larkins, 2013). A rather significant oversight of our study is that we did not ask regarding gender of participants’ partners. Future research studying this and similar interventions should ask regarding both sexual orientation and the sex of the partner(s) and examine how these factors affect the results. It is likely that participants who have sexual encounters exclusively with men might benefit most from this intervention, and those who have sex exclusively with women least. Of course, it is possible that partners, including the sex of one’s partner, might change during the span of the study and future research should take this into account as well. Future research should also assess relationship status over the course of the study (i.e., having sex in a committed relationship or in casual relationships or both). Additionally, given that the orgasm gap is seen mainly in mixed-sex sexual encounters or relationships, an additional fruitful avenue for future research would be to replicate this study and ask participants if they had shared or discussed the book or portions of the book with their male partners; we would assume that those who had might evidence greater change than those who had not. Another final important avenue for future research pertaining to partners would be to examine the effectiveness of interventions targeting male partners. One such intervention could be to have men who engage in sexual activity with women read the *Becoming Cliterate* chapter aimed at male audiences and empirically test its effectiveness in improving partnered women’s sexual pleasure.

Other avenues for future research include comparing the effectiveness of this specific intervention book to another sexual self-help book aimed at enhancing orgasmic function. Likewise, another study could examine this book when read alone (as was done in this study) versus when read with intermittent or ongoing therapist-in-person support (i.e., a study of guided vs. unguided self-help). Research could also explore
the use of this book when read by couples rather than individual women. Future research could also investigate the comparative efficacy of in-person therapy and this book for sexual concerns, including orgasm during partnered sex. Finally, this study sought women wanting to improve their sexual functioning rather than those specifically indicating distress about their sexual functioning. While we hypothesize that the changes would be even more pronounced in a distressed group, this is again an important avenue for future research. Additionally, future research should examine how variables may work together to affect outcomes. For example, it may be that increases in sexual well-being in the intervention group were a result of changes in attitudes toward women’s genitals. Thus, future analyses with a larger sample size could help determine the specific aspects of the book that may have the greatest effect.

Even while awaiting the results of such future studies, the results of this study provide evidence that clinicians may consider recommending the intervention book used in this study to female clients desiring to improve their sexual well-being. Clinicians may also choose to recommend this book in the early stages of treatment or as a supplement to ongoing face-to-face counseling (Norcross, 2006). As noted by Mintz et al. (2012), bibliotherapy interventions with evidence of efficacy can be used by clinicians before treatment begins, during counseling, or after termination of counseling in order to serve as an ongoing resource. The book could also be especially useful to women who are unable to afford face-to-face counseling and are seeking to improve their sexual well-being.

This study has broader implications beyond the efficacy of the book studied here. First, this study adds to the limited literature on the efficacy of bibliotherapy, which has the ability to provide treatment to larger populations in a non-stigmatizing modality (Harwood & L’Abate, 2010). Second, given the rapidly changing cultural landscape for sexually active young women, this study explores what kind of interventions are useful at negating or lowering the negative attitudes that have increased with the growing use of pornography (i.e., attitudes toward women’s genitals). Finally, this study adds to the conclusion that bibliotherapy should be considered as a mainstay of the treatment of sexual concerns (van Lankveld, 2009). It is hoped that this study will serve as a starting point for additional research on the efficacy self-help interventions for young women’s sexual well-being.

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References


