Cognitive Distraction and Women’s Sexual Functioning

An Honors Thesis (HONRS 499)

by

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Abstract

Past research on the role of cognitive distraction in sexual dysfunction has typically focused on males and has been conducted in the laboratory using artificial stimuli. In the current study, young adult women (N = 74), with coital experience completed questionnaires regarding cognitive distraction and their sexuality. Those women who reported greater cognitive distraction during sexual activity with a partner also reported lower sexual esteem, less sexual satisfaction, less consistent orgasms, and higher incidence of pretending orgasm even after the women’s general affect, sexual desire, general self focus, general sexual attitudes, and body dissatisfaction were statistically controlled. Results are discussed with regard to directions for future research and implications for sex therapy.
Cognitive Distraction and Women's Sexual Functioning

At least occasional sexual difficulties (e.g., the inability to achieve arousal or orgasm) are quite common (Laumann, Gagnon, Michael & Michaels, 1994; Spector & Carey, 1990). Some of the psychosocial factors that have been pinpointed in the development of sexual dysfunction between partners include communication difficulties, sexual misinformation, destructive relationships, and faulty learning processes (Allgeier & Allgeier, 1995). However, according to Masters and Johnson (1970; see also Kaplan, 1974), anxiety about sexual performance, which may stem from an inward, self focus on one's abilities and appearance, is the most important immediate cause of sexual dysfunction.

Masters and Johnson (1970) originated the concept of spectatoring, which refers to an inspection and monitoring of one's own sexual activity, or an intense self focus during sexual interactions, rather than an immersion in the sensory aspects of a sexual experience. Sexual spectators become distracted by thoughts about their performance which, in turn, interrupt the "normal" flow of sexual functioning and can inhibit sexual arousal and orgasm (Masters & Johnson, 1970). When cognitive interference occurs, it leads to arousal of the autonomic nervous system producing a negative emotional state that is not usually synonymous with sexual arousal and pleasure.

Barlow (1986) developed the concept of spectatoring with regard to a causal model of attentional processes during sexual functioning. According to Barlow, deficits in sexual functioning due to inhibited excitement are caused by the inability of the spectator to properly decode erotic cues required for arousal. Sexual performance cues activate performance anxieties for the spectating individual, which cause a shift in attention from the rewarding properties of
arousal to the threatening consequences of sexual failure. This distraction can cause decreased abilities in sexual performance for the spectator (Barlow, 1986; Cranston-Cuebas & Barlow, 1990). The results of numerous laboratory studies have supported an association between cognitive distraction and decreased sexual arousal (Adams, Haynes, & Brayer, 1985; Elliott & O'Donohue, 1997; Karafa & Cozzarelli, 1997; Koukounas & McCabe, 1997; Przybyla & Byrne, 1984).

Outside the laboratory, Faith and Schare (1993) attempted to examine the relationship between excessive self focus on bodily appearance, which may cause anxiety, and sexual experiences. They hypothesized that individuals who persistently evaluated their appearance negatively would tend to be sexually avoidant and, as a result, less sexually experienced and knowledgeable. As predicted, negative body image was related to lower levels of sexual experience when sexual attitudes and knowledge, as well as global psychological adjustment, were held constant (Faith & Schare, 1993). However, because these researchers only used measures of general body image and sexual experience, these results do not necessarily indicate that the relations between these variables are due to excessive self focus or spectatoring during sexual activity.

To the extent that those individuals with negative body image are objectively less attractive, decreased sexual experience simply may be due to fewer opportunities for sexual interaction with a partner rather than active avoidance of sexual interactions. Indeed, recent research supports this alternative explanation (Wiederman & Hurst, 1998). Recent research has also shown that much of the correlation between body image and sexual experience can be explained by a composite of self focus ratings on three trait adjectives shown to be associated
with a narcissistic personality profile (Trapnell, Meston, & Gorzalka, 1997). Again, these findings suggest that body-image-related sexual inexperience may be due to motivational factors instead of self focus mechanisms.

Relatively few studies have examined the effects of cognitive distraction on sexual arousal in women as most research on spectatoring has focused on men. Also, most of the research in this area has been done in laboratory settings, which are often artificial and do not replicate the environment in which one typically becomes sexually aroused. Therefore, in the current study, we sought to explore women’s cognitive distraction during actual, recalled sexual interactions and the relationships such distraction may have with such variables as sexual esteem, sexual satisfaction, orgasm consistency, and pretending orgasm. Because previous research has shown that there is a relationship between one’s level of sexual experience and body image (Wiederman & Hurst, 1998), general body dissatisfaction was controlled for in the current study. It has also been demonstrated that increased self focused attention is related to a host of clinical disorders, including sexual dysfunction (Ingram, 1990), so general self focus was also considered in the current study. Because research has shown that depression is related to decreased sexual desire (American Psychiatric Association, 1994; Nofzinger, Thase, Reynolds, Frank, Jennings, Garamoni, Fasiczka, & Kupfer, 1993), a measure of general affect was also used as a control in the current study. Other variables which may influence sexual arousal and activity include sexual attitudes and desire for sexual interaction with a partner. Therefore, in the current study we examined the role of cognitive distraction in women’s dyadic sexual interactions above and beyond these other important variables.
Method

Participants

Women \((n = 120)\) were recruited from introductory psychology classes at a mid-sized public university in the Midwest with an annual enrollment of approximately 19,000 students. Each participant received research credit toward partial completion of the course. To ensure a relatively homogeneous sample with regard to age, the few women who were younger than 18 years \((n = 2)\) and older than 22 years \((n = 3)\) were excluded from analyses. The resulting sample consisted of 115 young adult women who ranged in age from 18 to 21 years \((M = 18.85; SD = .85)\). The majority of these participants were Caucasian \((93.0\%)\); 4.3\% were Black; 0.9\% Latina; and 1.7\% indicated “Other” with regard to ethnicity.

Measures

Participants completed a questionnaire packet containing previously published measures of general self focus, body dissatisfaction, life satisfaction, sexual esteem, sexual attitudes, and sexual drive/desire. Also included were items written for the current study regarding spectating tendencies (cognitive distraction during a sexual interaction), sexual satisfaction, orgasm consistency, and pretending orgasm.

General Self Focus. General self focus was measured using the previously published Self Experience From the Self Perspective subscale of the Social Awareness Inventory (SAI; Sheldon, 1996). Respondents were asked to rate the eight items as “Very uncharacteristic of me (1),” “Somewhat uncharacteristic of me (2),” “Somewhat characteristic of me (3),” or “Very characteristic of me (4).” An overall score was generated by summing across items. In the
current study, the internal consistency coefficient for these items was .84. Sample item: “I reflect about myself and my inner motives a lot.”

**General Affect.** Because ours was a nonclinical sample, general affect was measured using the Satisfaction With Life Scale (SWLS; Pavot and Diener, 1993). This scale was designed to assess a respondent’s satisfaction with life on a global level, and does not gauge satisfaction within any particular domains. The SWLS shows good convergent validity with other assessments of subjective well being (Pavot & Diener, 1993). Respondents were asked to indicate their level of agreement with each of the five items using a 7-point scale (anchored as 1 = Strongly disagree, 4 = Neither agree nor disagree, 7 = Strongly agree). An overall score was generated by summing across items. The internal consistency coefficient for these items was .86 in the current study. Sample item: “The conditions of my life are excellent.”

**Body Dissatisfaction.** The general body dissatisfaction subscale created by Probst, Vandereycken, Van Coppenolle, and Vanderlinden (1995) was used as a general measure of body dissatisfaction. The four items were: “When I compare myself with my peers’ bodies, I’m dissatisfied with my own,” “I’m inclined to hide my body (for example by loose clothing),” “When I look at myself in the mirror, I’m dissatisfied with my own body,” and “I envy others for their physical appearance.” Respondents indicated how often they agreed with each item using a 6-point scale (ranging from 1 = Never to 6 = Always). An overall score was generated by summing across items. In the current study, the internal consistency coefficient was .89.

**Sexual Attitudes.** The Sexual Opinion Survey (SOS; Fisher, Byrne, White & Kelley, 1988) was used as a measure of general sexual attitudes. This measure has been shown to have high levels of reliability and validity. Respondents were asked to indicate their level of
agreement with each of the 21 items using a 7-point scale (ranging from 1 = Strongly Agree to 7 = Strongly Disagree). An overall score was generated by summing across items. In the current study, the internal consistency coefficient was .90. Sample item: “I think it would be very entertaining to look at erotica (sexually explicit books, videos, etc.).”

**Sexual Drive/Desire.** To measure participants’ desire to engage in sexual activity with a partner, the Dyadic Sexual Desire factor of the Sexual Desire Inventory (Spector, Carey, & Steinberg, 1996) was used. This seven-item measure has been shown to be both reliable and valid. The first two items were “During the past several months, how often would you have liked to have engaged in sexual activity with another person (for example, touching each other’s genitals, giving or receiving oral stimulation, sexual intercourse, etc.)?” and “During the past several months, how often have you had sexual thoughts involving another person?”

Respondents were asked to indicate how often they had such thoughts or feelings by using an 8-point scale (ranging from 0 = Not at all to 7 = More than once a day). The remaining five items examined respondents’ levels of sexual desire in particular situations and were based on a 9-point scale (with 0 = No Desire and 8 = Strong Desire). An overall score was generated by summing across items. Sample item: “When you first see an attractive person, how strong is your sexual desire?” The internal consistency coefficient in the current study was .77.

**Cognitive Distraction.** Twenty items were written to examine cognitive distraction or interference typically experienced by the individual during a sexual interaction (see Appendix). These items covered two possible foci of concern: sexual performance and bodily appearance. Participants responded to the items using a 6-point scale (ranging from 1 = Always to 6 = Never) to indicate how often the respondent experienced agreement with the statement.
Sexual Esteem. Sexual esteem, or the tendency to evaluate oneself positively as a sexual partner, was measured with the short form (Wiederman & Allgeier, 1993) of the sexual esteem scale from Snell and Papini (1989). Respondents indicated their degree of agreement with each of the five statements using a 5-point scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree). An overall score is generated by summing across items, with higher scores indicating relatively greater sexual esteem. In the current study, the internal consistency coefficient was .92. Sample item: “I think of myself as a good sexual partner.”

Orgasm Consistency and Pretending Orgasm. Consistency of orgasm was measured using five items written specifically for the current study. Each respondent was asked to indicate, using a 6-point scale (ranging from 1 = Never to 6 = Always), how often she experienced orgasm in the following situations: “When you stimulate your own genitals,” “When your genitals are stimulated by a partner’s hand (manual stimulation),” “When your genitals are stimulated by a partner’s mouth (oral sex),” “When engaging in sexual intercourse (penis in vagina),” and “Overall, across sexual situations with a partner.” An overall score was generated by summing across items. The internal consistency coefficient for these items was .82. Additionally, respondents were also asked to estimate the percentage (0-100%) of sexual encounters with a partner during which they had pretended orgasm.

Sexual Satisfaction. To measure the extent to which participants were satisfied with their dyadic sexual interactions, three items were written for use in the current study. These items were: “In general, how satisfied are you with the quality of the sexual experiences you have had with a partner?,” “Overall, how pleasurable have your sexual experiences with a partner been for you?,” and “All things considered, how satisfied are you with the ways your
body has responded during sexual activity with a partner?" Respondents were asked to indicate their level of agreement with each statement using a 5-point scale (ranging from 1 = Not at All to 5 = Very Much). An overall score was generated by summing across items. The internal consistency coefficient for these items was .91.

Procedure

At the point of signing up for potential participation in the study, respondents were only aware that participation was worth one half hour of research credit. The nature of the study was not disclosed until arrival at the testing site. All students received a verbal description of the nature of the study as well as instructions on how to participate. Students were reminded of the voluntary nature of their participation and were encouraged to discontinue participation if they felt uncomfortable. None of the potential participants declined participation upon learning the nature of the study. Participants completed the anonymous questionnaire booklet in groups ranging from 3 to 10 students and all did so in the presence of the first author. After completing the questionnaire, students were instructed to put all survey materials in a collection envelope located at the front of the room, after which each participant was thanked and her credit slip was signed denoting participation.

Results

An initial principal components factor analysis of the 20 cognitive distraction items was performed and revealed two separate factors. The first factor was comprised of the performance-based distraction items and had an eigenvalue of 12.96, accounting for 64.8% of the variance. The internal consistency coefficient for the performance-based items was .95. The second factor consisted of the appearance-based distraction items, and had an eigenvalue of
1.35, accounting for an additional 6.8% of the variance. The internal consistency coefficient for the appearance-based items was .95. Because the appearance-based factor accounted for so little of the variance, and because scores on each factor were highly related ($r = .83$), the two factors were combined into one factor, which was labeled Cognitive Distraction. An overall score was generated by summing across the 20 items after reverse scoring each. In this way, higher scores indicated greater levels of self-reported cognitive distraction during sexual activity with a partner.

Because some of the measures of interest in the current study (e.g., orgasm consistency) were relevant for only those who had experienced sexual intercourse, and we thought it important that all respondents under consideration have a minimum level of sexual experience, the women ($n = 41$) who indicated that they had not experienced vaginal intercourse were then excluded from further analysis. To test for a relationship between cognitive distraction and sexual functioning, a separate regression analysis was performed for each of the four outcome variables. The results of these analyses are presented in Table 1. In each analysis, the variables entered at Step 1 were general affect, sexual desire (with a partner), general self focus, sexual attitudes (SOS), and body dissatisfaction. At Step 2, cognitive distraction was added to the equation. Note that, for each of the four outcome variables, cognitive distraction explained additional, statistically significant variance above and beyond general affect, sexual desire (with a partner), general self focus, sexual attitudes, and body dissatisfaction. Therefore, women who reported greater cognitive distraction during sexual interactions reported lower sexual esteem, less sexual satisfaction, less consistent orgasms, and higher incidence of pretending orgasm with a partner.
Discussion

We found that cognitive distraction during sexual activity had the anticipated relationship with women’s sexual esteem, sexual satisfaction, orgasm consistency, and frequency of pretending orgasm. Importantly, even when several other related variables that are thought to influence women’s appraisal of their sexual experiences were statistically controlled, cognitive distraction during sexual activity still had a statistically significant relationship with how satisfied women were with their sexual experience and how they viewed themselves as sexual partners. Because much of the previous research in this area has focused on men, this study offers new insight in that it demonstrates the ways in which women may be affected by distracting thoughts during sexual activity with a partner.

Surprisingly, although we had anticipated that the items written to measure cognitive distraction would form two distinct factors (appearance-based and performance-based distraction), these factors were overlapping among the women in the current study. One explanation is that women are socialized to believe that to be an adequate sex partner, one must conform to societal norms regarding physical attractiveness and what is considered “sexy.” It may be that the women in our study believed that being attractive equates to performing well as a sexual partner by simply being an engaging visual stimulus. Those who did not consider themselves attractive may have viewed their sexual performance negatively because they believed they did not fit the stereotype of what makes a woman “sexy.”

Because men are not under the same types of societal constraints, it may be that men would make a distinction between appearance-based distraction and performance-based distraction during sexual activity with a partner. Previous laboratory studies have examined the
relationship cognitive distraction has with men’s sexual arousal using approaches such as a dichotic listening paradigm, which in one study involved the presence of a sexually explicit audiotape played in one ear and increasingly difficult arithmetic problems which the subject was required to solve played in the other ear (Geer & Fuhr, 1976). To date, none have directly examined cognitive distraction involving performance-based or appearance-based cognitive distraction. The implications for future research and possible clinical application are evident if such gender differences exist.

The results of the current study raise interesting issues regarding the widely used therapeutic technique of sensate focus (Masters & Johnson, 1970), which involves re-experiencing pleasure in the absence of anxiety regarding sexual performance. The aim of sensate focus is to redirect an individual to focus on the physical sensations of the sexual experience instead of the cognitive monitoring of his or her actions and responses during a sexual encounter. The assumption underlying sensate focus is that the individual is anxious about performance issues, and not necessarily his or her physical appearance. However, our results demonstrate that performance and appearance distractions in women may not be separate and, therefore, sensate focus may not work as well with women as with men. For example, if a female becomes anxious about being nude in front of a partner, focusing on the sensations of massage by an intimate partner may not be a plausible alternative. She may be just as distracted by concerns about how her body appears to her partner during massage as she would be during sexual activity.

Future research should explore possible gender differences in appearance-based versus performance-based cognitive distractions during sexual encounters. Other possibilities for future
Also, more research is needed to determine the directionality of the relationship between cognitive distraction and sexual esteem, orgasm consistency, pretending orgasm, and sexual satisfaction. For example, it is currently unclear whether those who are initially distracted during sexual activity have resulting lower sexual satisfaction or whether those individuals who are initially less satisfied with their sex lives are more likely to be distracted as a result. Similar claims can be made for sexual esteem, pretending orgasm, and orgasm consistency. Future research may show that the relationship between these variables is not unidirectional, but rather circular. For example, a woman with low sexual esteem may be prone to focus on concerns over appearance and performance during sexual activity. These distractions may result in decreased responsiveness and pleasure, thereby lowering her sexual esteem even further.
Table 1

Results of Multiple Regression Analyses

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Step 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Step 2&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Change F for Change</td>
<td>Change F for Change</td>
</tr>
<tr>
<td></td>
<td>in $R^2$</td>
<td>in $R^2$</td>
</tr>
<tr>
<td>Sexual Esteem</td>
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<td>.05 5.96*</td>
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<tr>
<td>Orgasm Consistency</td>
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<td>.07 5.89*</td>
</tr>
<tr>
<td>Pretending Orgasm</td>
<td>.02 .29</td>
<td>.08 6.38*</td>
</tr>
<tr>
<td>Sexual Satisfaction</td>
<td>.11 1.73</td>
<td>.10 8.71*</td>
</tr>
</tbody>
</table>

<sup>a</sup> Step 1 included the variables general affect, sexual desire (with a partner), general self focus, sexual attitudes, and body dissatisfaction, $df = 5, 68$.

<sup>b</sup> Step 2 included cognitive distraction, $df = 6, 67$.

* $p < .05$
References


Appendix

Please use the following scale to indicate how often you agree with each statement or how often you think it would be true for you. The term partner refers to someone with whom you are or would be romantic or sexually intimate. Sexual activity refers to mutual stimulation of genitals, oral sex, or sexual intercourse (penis in vagina).

1 2 3 4 5 6
Always Usually Often Sometimes Rarely Never

1. During sexual activity, I am worried about how my body looks to my partner.

2. While engaged in sexual activity, I worry that my partner is not enjoying the way I am touching his body.

3. During sexual activity, I worry the whole time that my partner will get turned off by seeing my body without clothes.

4. It is difficult not to think about whether my movements during sexual activity are pleasing to my partner.

5. I can only quit worrying about how my body looks to my partner if it is dark during sexual activity.

6. I am usually worried about my partner’s satisfaction with my actions while engaged in sexual activity.

7. During sexual activity, it is difficult not to think about how unattractive my body is.

8. I often worry about the way I am behaving toward my partner during sexual activity.

9. It is difficult to enjoy sex because of my concerns over how appealing my body is to my partner.
10. During sexual interactions, I am concerned that my level of activity is not satisfying my partner.

11. While nude in front of a partner, I can’t help but think about how unattractive my body is.

12. While engaged in sexual activity with a partner, I think too much about the way I am moving.

13. During sexual activity, I am distracted by thoughts about how I look to my partner.

14. Thoughts about whether my actions are satisfying my partner distract me during sexual activity.

15. If the lights are on during sexual activity, I worry too much about how appealing my body is to my partner.

16. During sexual activity, I think too much about whether my partner is happy with the way I am touching his body.

17. During sexual activity, I can focus on my pleasure much more if I am in a position such that my partner can not see my body.

18. While engaged in sexual activity, I am distracted by thoughts regarding what my partner thinks about my behavior.

19. I can only quit worrying about how my body looks to my partner if there are covers over my body during sexual activity.

20. Overall, during sexual activity, I am distracted by thoughts about my sexual performance.