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THE ROLE OF SELF-OBJECTIFICATION IN WOMEN'S SEXUAL FUNCTIONING

AMY STEER AND MARIKA TIGGEMANN
School of Psychology, Flinders University

The study aimed to test the model proposed by objectification theory (Fredrickson & Roberts, 1997) as it applies to women's sexual functioning. A sample of 116 women completed questionnaire measures of self-objectification, its proposed consequences, relationship satisfaction, and sexual functioning. In accord with the predictions of the theory, self-objectification was related to body shame and appearance anxiety, which were in turn related to self-consciousness during sexual activity and to decreased sexual functioning. Women in an exclusive relationship reported less self-consciousness during sexual activity than women not in a relationship. For the former group, satisfaction with their relationship emerged as the major predictor of sexual functioning. It was concluded that objectification theory provides a useful framework for furthering our understanding of female sexual function.

Women's sexual functioning is complex and clearly not a purely physical phenomenon, but instead is influenced by the psychological, relational, and sociocultural context in which sexual activity occurs (Althof et al., 2005). Theories of male sexual function and sexual problems cannot be readily applied to women (Tiefer, 2001). Unlike male sexual function which can be measured quantitatively, a woman's sexual response is more qualitative and less well understood (Althof et al., 2005). These complexities have generated debate about how exactly to define sexual functioning, as well as increasing recognition that many factors contribute to women's sexual func-

Address correspondence to Dr. Marika Tiggemann, School of Psychology, Flinders University, GPO Box 2100, Adelaide 5001, South Australia; E-mail: Marika.Tiggemann@flinders.edu.au.

tioning, together with a call for more specific consideration of the context in which sexual problems occur (Tiefer, 2001).

One account that adopts a wider sociocultural perspective on women's lived experience is provided by objectification theory, formalized by Fredrickson and Roberts (1997). This account is based on the premise that in Western societies, the female body is socially constructed as an object to be looked at and evaluated. Objectification theory proposes that one important consequence of being a woman in such a culture that sexually objectifies the female body, for example through the mass media and male gaze, is that girls and women are gradually socialized to internalize an observer's perspective of their self. They come to view themselves as objects or sights to be appreciated by others, a process termed "self-objectification" (Fredrickson & Roberts, 1997). This way of thinking is manifested as habitual and constant monitoring of the body's outward appearance, or self-surveillance (McKinley & Hyde, 1996), and leads to a number of negative psychological consequences, including increased body shame and appearance anxiety. Body shame is a likely result when a woman's body fails to match up to the thin idealized bodies presented in the media. As the evaluation and scrutiny to which women's bodies are subject is often out of a woman's control, she may also experience a great deal of anxiety, resulting in constant monitoring and adjusting of her appearance (Keelan, Dion, & Dion, 1992). More generally, thoughts about her appearance and how her body appears to others may prevent a woman from experiencing positive emotions or flow (Csikszentmihalyi & Csikszentmihalyi, 1988), and may disrupt cognitive performance (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998).

Fredrickson and Roberts (1997) argued that the combination of these negative consequences of self-objectification puts women at increased risk of several mental health disorders that occur disproportionately in women, namely eating disorders, depression, and sexual dysfunction. To date, the majority of empirical research testing the predictions of objectification theory has focused on the outcome of disordered eating, and there is now a considerable corresponding body of evidence confirming the various pathways in the objectification model of disordered eating (for example, Greenleaf, 2005; McKinley & Hyde, 1996; Moradi, Dirks, & Matteson, 2005; Noll & Fredrickson, 1998; Tiggemann & Lynch, 2001; Tiggemann & Slater,

2001). Similarly, a smaller body of research has supported the model as it relates to depression (e.g., Miner-Rubino, Twenge, & Fredrickson, 2002; Muehlenkamp & Saris-Baglama, 2002; Tiggemann & Kuring, 2004). However, to our knowledge, no research has yet tested the entire model as it applies to sexual dysfunction. Consequently, the present study will examine the predictions of objectification theory with respect to sexual functioning.

Indeed, it might be argued that objectification theory should be particularly relevant to the sexual domain. In contrast to eating disorders and depression, sexual activity by definition involves another person focusing attention on one's body. Thus self-objectification and its negative consequences are likely to be exacerbated in the particular context of sexual activity. More generally, there has been little research investigating the relationship between body image and sexual functioning (Davison & McCabe, 2005), although body dissatisfaction itself has been shown to be responsive to particular situations that vary in body focus, e.g., at the beach in a bathing suit walking past a group of attractive people (Haimovitz, Lansky, & O'Reilly, 1993; Tiggemann, 2001). While a few studies have suggested a relationship between body image and sexual functioning (Ackard, Kearney-Cooke, & Peterson, 2000; Faith & Schare, 1993; Hoyt & Kogan, 2001), others have failed to find evidence for such a relationship (Cash, Maikkula, & Yamaiya, 2004). To date, no study has investigated the specific variables proposed in objectification theory, namely body shame and appearance anxiety.

In addition to predictions derived from Fredrickson and Roberts's (1997) model, the present study attempted to provide a more comprehensive account of how self-objectification applies in the sexual context. In particular, it was predicted that self-consciousness during sexual activity would provide the mediating link between general body shame and appearance anxiety, and poorer sexual functioning.

Given that the shame and anxiety that many women feel about their bodies in the general context of everyday life may carry over, and indeed be heightened, in the specific context of their sexual experiences, self-consciousness during sexual activity is the likely outcome (Cash, Maikkula, & Yamamiya, 2004; Fredrickson & Roberts, 1997). In support, Wiederman (2000) reported that approximately one third of college women in his sample indicated experiencing self-consciousness during sexual activity. More recently, Meana and

Nunnink (2006) found that women reported higher levels of overall and appearance-based distraction during sex than did men, which was predicted by negative body image.

Self-consciousness and negative thoughts about one's body during sexual activity have in turn been shown to decrease women's sexual functioning (Cash et al., 2004; Ellison, 2001). If a woman is distracted by thoughts about her body, she is less likely to be able to concentrate enough on her own sexual pleasure to gain maximum sexual satisfaction. Masters and Johnson (1970) first described this notion as "spectatoring," and proposed that sexual spectators become distracted by thoughts about their sexual performance that then inhibit sexual arousal and satisfaction. Cash et al. (2004) have suggested that thoughts about one's appearance may operate in the same way. Dove and Wiederman (2000) found that women who reported greater cognitive distraction due to appearance-related thoughts reported poorer sexual functioning. Thus self-consciousness during sexual activity was postulated as the proximal predictor of poorer sexual functioning.

For women, sexual activity largely takes place in the context of relationships. In her review of relationship satisfaction in women's sexual functioning, Byers (2001) asserted the importance of considering relationship satisfaction in any discussion of women's sexual functioning. Further, being in a relationship may itself be important in determining a woman's level of self-consciousness. Wiederman (2000) found that self-consciousness during sexual activity was significantly higher among women not currently in a (heterosexual) relationship than those in a relationship. He reasoned that women not in a relationship may have less opportunity to become desensitized to their body image concerns in this arena. Thus a subsidiary aim of the present research was to investigate how relationship status and relationship satisfaction influence sexual self-consciousness and functioning. Differences between women who were and were not in a relationship were examined, as were correlations with relationship satisfaction for the latter group.

In sum, the present study sought to extend the predictions of objectification theory to a new domain, that of sexual functioning. Traditionally, self-objectification and self-surveillance have been conceptualized and assessed as equivalent manifestations of the same underlying construct, and individual researchers have typi-

cally used only one measure. We have, however, previously included independent assessment of both variables and successfully modelled habitual self-surveillance as the result of, rather than a component of, self-objectification (Tiggemann & Lynch, 2001; Tiggemann & Slater, 2001). In accordance with predictions based on objectification theory, then, it was hypothesized that self-objectification would lead to self-surveillance, which would lead to body shame and appearance anxiety, which in turn would predict sexual (dys)function. In addition, in an attempt to provide a more comprehensive account of how self-objectification applies to the sexual context, it was hypothesized that the relationships between body shame and appearance anxiety (the negative consequences of self-objectification) and sexual functioning, would be mediated by the level of self-consciousness that a woman experiences during sexual activity. It was also hypothesized that women in relationships would experience less self-consciousness during sexual activity and greater sexual functioning.

METHOD

PARTICIPANTS

Participants were 116 female undergraduate students, ranging in age from 18 to 54 years ($M = 22.74$, $SD = 8.44$). They were recruited from psychology classes at Flinders University in South Australia and received course credit for their participation. Students at Flinders University come from a variety of socioeconomic backgrounds, are primarily local, and overwhelmingly (> 90%) Caucasian.

PROCEDURE

Participants were administered a questionnaire which required approximately 20 minutes to complete. The questionnaire contained measures of self-objectification and self-surveillance, measures of the proposed consequences of self-objectification (body shame and appearance anxiety), self-consciousness during sexual activity, relationship status and satisfaction, and the outcome variable of sexual functioning.

MEASURES

Self-Objectification. Self-objectification was measured by Noll and Fredrickson's Self-Objectification Questionnaire (1998). This measure was designed to assess the extent to which individuals view their bodies in terms of what they look like (appearance-based terms), as opposed to what they can actually do (competency-based terms). The questionnaire lists 10 different body attributes, five of which are competency-based (strength, physical coordination, energy level, health, and physical fitness), and five of which are appearance-based (weight, sex appeal, physical attractiveness, firm/sculpted muscles, and measurements). Participants are asked to rank these 10 body attributes in order of their impact on their physical self-concept, from "most important" to "least important." Scores are calculated by subtracting the sum of the appearance rankings from the sum of the competence rankings, resulting in scores ranging from -25 to +25. Positive scores indicate a greater emphasis on appearance, which is interpreted as a higher level of self-objectification, while negative scores indicate a greater emphasis on physical competence. Noll and Fredrickson (1998) reported that the Self-Objectification Questionnaire demonstrated satisfactory construct validity on the basis of its moderate correlations with scores on the Appearance Anxiety Questionnaire (Dion, Dion, & Keelan, 1990) and the Body Image Assessment (Williamson, Davis, Bennett, Goreczny, & Gleaves, 1985).

Self-Surveillance. Self-surveillance was measured by the Body Surveillance Subscale of McKinley and Hyde's (1996) Objectified Body Consciousness Scale. The Body Surveillance Subscale measures the frequency with which participants monitor their body and think of it in terms of how it looks rather than how it feels. The scale consists of eight items (e.g., "I am more concerned with what my body can do than how it looks" [reverse coded]) to which participants respond on a 7-point Likert-type scale ranging from 1 ("strongly agree") to 6 ("strongly disagree"), with a "NA" (not applicable) option. Total scores were calculated on a prorata basis, using the mean score of answers to at least six items. Potential scores range from 8 to 48, with higher scores indicating higher levels of self-surveillance. McKinley and Hyde (1996) reported acceptable internal reliability of the scale (ranging from .76 to .89), and moderate test-retest reliability over a

two-week period ($r = .79$). The internal reliability in the present sample was consistent with these findings, $\alpha = .80$.

Body Shame. Body shame was measured by the Body Shame Subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996). This scale assesses the extent to which a participant feels shame if they do not meet cultural expectations for their body. The Body Shame Scale consists of eight items (e.g., "I feel like I must be a bad person when I don't look as good as I could"), which are rated and scored in the same manner as the Self-Surveillance Scale. Possible scores again range from 8 to 48, with higher scores indicating higher levels of body shame. McKinley and Hyde (1996) reported acceptable internal reliability for the Body Shame Subscale, with Cronbach's alpha ranging from .70 to .84, and reasonable test-retest reliability over a two-week period ($r = .78$). The internal consistency in the present sample was adequate, $\alpha = .79$.

Appearance Anxiety. Appearance anxiety was measured by the short form of the Appearance Anxiety Scale developed by Dion, Dion and Keelan (1990). This scale consists of 14 self-statements (e.g., "I feel nervous about aspects of my appearance"), with which participants rate their level of agreement on 5-point Likert-type scales (1 = "never," 5 = "almost always"). Total possible scores range from 14 to 70, with higher scores indicating a greater degree of appearance anxiety. Dion et al. (1990) reported acceptable internal consistency levels for the 30-item measure (alpha coefficients of .89 and .86), and good test-retest reliability over a two-week period ($r = .89$). In the present sample, internal consistency was similarly high, $\alpha = .90$.

Self-Consciousness during Sexual Activity. Self-consciousness during sexual activity was measured using the Body Image Self-Consciousness Scale (BISC) developed by Wiederman (2000). The measure consists of 15 items (e.g., "During sexual activity, I am (would be) concerned about how my body looks to my partner") to which participants respond on a 6-point Likert-type scale. The items are written so that women with and without any sexual experience involving a partner can respond, as can those with male or female sexual partners. Total possible scores range from 0 to 75, with higher scores indicating a greater degree of self-consciousness during sexual activity. The scale has been shown to demonstrate good convergent and discriminant validity, high internal consistency (Cronbach's $\alpha = .94$) and good test-retest reliability over a three-week

period ($r = .92$) among undergraduate women (Wiederman, 2000). The internal reliability reported in this sample, $\alpha = .96$, was similarly high.

Relationship Status. Participants were asked to nominate their relationship status from six options: "not dating anyone currently," "casually dating one or more people," "dating one person exclusively," "living with romantic partner," "engaged or planning to marry," and "married." Following Wiederman (2000), responses were then used to dichotomize the participants into two groups: those currently in, and those currently not in, an exclusive relationship. Participants who were not dating anyone currently or who were casually dating one or more people were considered not to be in an exclusive relationship, while the remaining four categories were considered to represent an exclusive relationship.

Relationship Satisfaction. Participants who defined themselves as being in an exclusive relationship were asked to complete a measure of relationship satisfaction, namely the Relationship Assessment Scale (RAS; Hendrick, 1988). The RAS is a measure of global relationship satisfaction, and consists of seven items (e.g., "How well does your partner meet your needs?") to which participants respond on 5-point Likert-type scales (1 indicating "low satisfaction," 5 indicating "high satisfaction"). Total scores range from 7 to 35, with higher scores indicating greater relationship satisfaction. The scale is applicable to anyone in an intimate relationship, including dating, cohabiting, and engaged/married couples (Hendrick, 1988). Vaughn and Baier (1999) demonstrated that the RAS correlated highly with longer measures of relationship satisfaction, and had high internal consistency ($\alpha = .91$) among a mixed gender sample of participants at a family-therapy training clinic. In the present sample, internal reliability was similarly high, $\alpha = .88$.

Sexual Functioning—General and Current. Sexual functioning was measured using three subscales of the Female Sexual Function Index (FSFI; Rosen et al., 2000). The complete FSFI is a brief 19-item self-report measure that provides scores on five domains of sexual function (as well as a total score) over the past four weeks: desire/arousal, lubrication, orgasm, satisfaction, and pain. The complete version has previously shown a high degree of internal consistency, with Cronbach's alpha values of .82 and higher (Rosen et al., 2000).

The present study included the subscales of desire/arousal, or-

gasm and satisfaction, resulting in an abbreviated 12-item version. (The subscales concerning lubrication and pain were omitted, as potentially too confronting and personal for participants.) The original FSFI items are limited in time to the previous four weeks (e.g., "Over the past four weeks, how often did you feel sexual desire or interest?"). Because women who have been sexually active previously, but not in the past four weeks, should be equally able to complete the scale, the FSFI items were also asked in general terms in the present tense (e.g., "Generally, how often do you feel sexual desire or interest?"). Thus participants who had *ever* had a sexual partner were asked to complete the measure of general sexual function, and then participants who had been sexually active in the previous four weeks were asked to complete the measure of current sexual function. In both cases total possible scores range from 12 to 60, with higher scores indicating better sexual functioning. The internal consistency was high for both scales ($\alpha = .89, .93$).

RESULTS

SAMPLE CHARACTERISTICS

Of the total sample of 116 participants, over half ($n = 64$; 55.2%) reported themselves as being in an exclusive relationship (dating one person exclusively, $n = 44$; living with romantic partner, $n = 9$; engaged or planning to marry, $n = 1$; and married, $n = 10$). Of the remainder, most were not dating anyone currently ($n = 47$), with a few ($n = 5$) casually dating one or more people. Not surprisingly, the women in an exclusive relationship were somewhat older ($M = 24.1$, $SD = 10.2$) than the women not in a relationship ($M = 21.0$, $SD = 5.0$), $t(112) = 2.01$, $p < .05$).

The majority of women ($n = 93$; 80.2%) responded to the section on general sexual functioning, indicating that they had been sexually active at some stage. Nearly all (22 out of 23) the nonresponders were not currently dating anyone (1 woman was dating one person exclusively). Just over half the women ($n = 60$; 51.7%) responded to the section on current sexual functioning, representing the subset of participants who had been sexually active over the four weeks prior to the questionnaire. Of the 56 currently sexually inactive women, the bulk ($n = 46$) were not dating anyone, 9 were dating one person exclusively and one was married. Age differences between activity groups

did not reach statistical significance for either general or current sexual activity.

RELATIONSHIP BETWEEN SELF-OBJECTIFICATION AND PROPOSED CONSEQUENCES, SEXUAL SELF-CONSCIOUSNESS AND FUNCTIONING

The relationships between self-objectification and the proposed consequences according to the objectification model (body shame and appearance anxiety), self-consciousness during sexual activity and sexual functioning were tested by correlational analyses. The resulting correlations are presented in Table 1. As hypothesized, self-objectification was significantly positively correlated with body shame and appearance anxiety. Similarly, self-surveillance was also positively correlated with both body shame and appearance anxiety.

Importantly, it can also be seen that self-objectification and self-surveillance were both positively correlated with self-consciousness during sexual activity. However, they were not related to sexual functioning, either when measured in general terms or in current terms among the currently sexually active subset of participants.

RELATIONSHIP BETWEEN THE CONSEQUENCES OF SELF-OBJECTIFICATION AND SEXUAL SELF-CONSCIOUSNESS AND FUNCTIONING

Table 2 presents the correlations between the proposed consequences of self-objectification, that is, body shame and appearance anxiety, and self-consciousness during sexual activity and sexual function. It can be seen that both were positively correlated with self-consciousness during sexual activity.

For sexual functioning, body shame and appearance anxiety were negatively correlated with the general measure. However, neither was significantly correlated with current sexual functioning among the sexually active participants. Self-consciousness during sexual activity was itself negatively correlated with sexual functioning, both among the broader group of participants and among the smaller group of currently sexually active participants.

TABLE 1. Correlations between Self-Objectification, Self-Surveillance and Their Proposed Consequences

	Self-Objectification	Self-Surveillance
Body Shame	.37**	.48**
Appearance Anxiety	.39**	.49**
Self-Consciousness during Sex	.20*	.40**
General Sexual Functioning	-.09	-.18
Current Sexual Functioning	-.05	-.13

Note. * $p < .05$; ** $p < .00$.

MEDIATING ROLE OF SELF-CONSCIOUSNESS DURING SEXUAL ACTIVITY

The hypothesized mediating influence of self-consciousness during sexual activity could be examined for sexual functioning measured in general terms. As body shame and appearance anxiety (proposed predictors) were both related to self-consciousness during sexual activity (proposed mediator) and general sexual functioning (outcome; Table 2), the preconditions for testing mediation set out by Baron and Kenny (1986) have been fulfilled. In contrast, mediation could not be tested for sexual functioning in the previous four weeks, as the proposed predictors (body shame, appearance anxiety) were not related to the outcome (current sexual functioning).

Mediation occurs when the impact of the predictor variable (body shame/appearance anxiety) on the outcome variable (sexual functioning) decreases after the effect of the mediator (self-consciousness during sexual activity) has been taken into account (Baron & Kenny, 1986). Thus the predictor variable affects the outcome variable only indirectly through an intervening mediating variable. Two sets of multiple regressions were used to examine the relationship between body shame/appearance anxiety and sexual functioning, after taking self-consciousness during sexual activity into account. First, when body shame and self-consciousness during sexual activity were entered together into the regression equation, only self-consciousness during sexual activity was significant, $\beta = -.43$, $p < .05$. More importantly, the beta value for body shame decreased from significant when entered on its own, $\beta = -.26$, $p < .05$, to zero, $\beta = .00$, $p > .05$, after controlling for self-consciousness during sexual activity. Similarly, the beta value for appearance anxiety decreased from sig-

TABLE 2. Correlations between Body Shame and Appearance Anxiety, with Self-Consciousness during Sexual Activity and Sexual Functioning

	Self-Consciousness During Sex	General Sexual Functioning	Current Sexual Functioning
Body Shame	.57**	-.26*	-.17
Appearance Anxiety	.68**	-.32*	-.17
Self-Consciousness during Sex	—	-.44**	-.32*

Note. * $p < .05$; ** $p < .001$.

nificance, $\beta = -.32$, $p < .05$, when entered on its own to nonsignificance, $\beta = -.04$, $p > .05$, after controlling for self-consciousness during sexual activity, $\beta = -.41$, $p < .05$. Sobel's test confirmed that these decreases in beta values were significant, $ts = 3.26, 3.00$, $p < .001$ (Preacher & Leonardelli, 2001).

These results indicate what Baron and Kenny (1986) term "perfect mediation." When self-consciousness during sexual activity (the mediator) was controlled, body shame and appearance anxiety were no longer significant predictors of general sexual functioning. Thus there was no direct influence of body shame or appearance anxiety. All their influence was indirect, via self-consciousness during sex. In other words, self-consciousness during sexual activity fully mediated the observed relationships between body shame and appearance anxiety on the one hand, and general sexual functioning on the other.

TESTS OF THE PROPOSED MODEL

In order to investigate the objectification model as it applies to sexual dysfunction in an integrated fashion, as well as the role of self-consciousness during sexual activity, a path diagram was constructed as both a descriptive and analytic procedure. In accordance with objectification theory, a weak causal ordering of variables was established, such that self-objectification was theorized to lead to self-surveillance, which was theorized to lead to body shame and appearance anxiety, which in turn would lead to self-consciousness during sex and finally to sexual dysfunction. Path analysis is a technique suitable for relatively small samples in which path coefficients are estimated from regression equations using a least squares ap-

TABLE 3. Path Coefficients (Beta Values) for Pathways in Causal Model

Pathways from:	Pathways to:				Sexual Functioning
	SO	BS	AA	SC-S	
Self-Objectification (SO)	.69**	.15	.13	-.12	.07
Self-Surveillance (SS)		.41**	.42**	.21 ^a	.02
Body Shame (BS)				.21 ^a	-.01
Appearance Anxiety (AA)				.47**	-.08
Self-Consciousness During Sex (SC-S)					-.41**

Note. * $p < .05$; ** $p < .01$; ^a $p = .07$

proach. For each equation, a variable is regressed on all variables which are assumed to be causally prior (Pedhazur, 1997). Here a full saturated model with all possible direct and indirect pathways was estimated for the subset of women who had sexual experience. The resulting path coefficients (standardized regression coefficients) are presented in Table 3.

The pathways with coefficients $> .2$ have been displayed in Figure 1. It can be seen that self-objectification does lead to self-surveillance, which leads to body shame and appearance anxiety, which in turn lead to self-consciousness during sex and finally to sexual dysfunction, as hypothesized in the model. There is just one additional direct pathway from self-surveillance to self-consciousness during sex. It should be noted that there are no direct pathways from self-objectification, self-surveillance, body shame or appearance anxiety, to sexual functioning.

EFFECT OF RELATIONSHIP STATUS AND RELATIONSHIP SATISFACTION

In order to examine the effect of relationship status, a series of independent t -tests was performed. As can be seen from the means in Table 4, participants who were currently in an exclusive relationship had substantially lower scores on self-consciousness during sexual activity than those participants not currently in a relationship, $t(115) = 4.46, p < .001$. There were no other significant differences between groups. Because the women in a relationship were significantly older

TABLE 4. Means (and Standard Deviations) According to Relationship Status, and Correlation with Relationship Satisfaction for Women in a Relationship

	Not in a Relationship (<i>n</i> = 52)	In a Relationship (<i>n</i> = 64)	Correlation with Relationship Satisfaction
Self-Objectification	-2.38 (15.88)	-.67 (14.12)	.03
Self-Surveillance	37.90 (7.04)	37.70 (7.49)	-.04
Body Shame	30.95 (9.51)	29.52 (7.96)	-.20
Appearance Anxiety	44.53 (11.04)	40.88 (9.06)	-.00
Self-Consciousness during Sexual Activity	34.81 (18.16)	20.96* (15.13)	-.20
General Sexual Functioning	43.00 (7.50)	44.87 (8.55)	.43**
Current Sexual Functioning	—	44.28 (10.01)	.48**

Note. * $p < .05$; ** $p < .001$.

than those not in a relationship, these analyses were repeated with age as a covariate. The pattern of results remained exactly the same.

Table 4 also provides the correlations with relationship satisfaction for those participants in an exclusive relationship ($n = 64$). It can be seen that relationship satisfaction was significantly related to sexual functioning, both in general ($r = .43$, $p < .001$) and for current sexual activity ($r = .48$, $p < .001$), but not to any other variable.

Regression analyses to predict general sexual functioning for the entire sample indicated that when all prior variables were entered simultaneously, there was significant prediction, accounting for 19.6% of the variance, $R = .443$, $F(5, 85) = 4.15$, $p < .01$. When restricted to the smaller subset of women in an exclusive relationship, this analysis was no longer significant, $F(5, 56) = 1.33$, $p > .05$. However, the inclusion of relationship satisfaction offered significant additional prediction, $R^2\text{change} = .146$, $F\text{change}(1, 53) = 10.54$, $p < .01$. The final regression with all variables included was significant and accounted for 26.4% of the variance, $R = .514$, $F(6, 53) = 3.17$, $p < .01$, with relationship satisfaction the only significant unique predictor, $\beta = .41$, $p < .01$. The same pattern was found for the prediction of current sexual functioning. The inclusion of relationship satisfaction offered significant additional prediction, $R^2\text{change} = .162$, $F\text{change}(1, 45) = 9.76$, $p < .01$. The final regression accounted for 25.4% of the variance in cur-

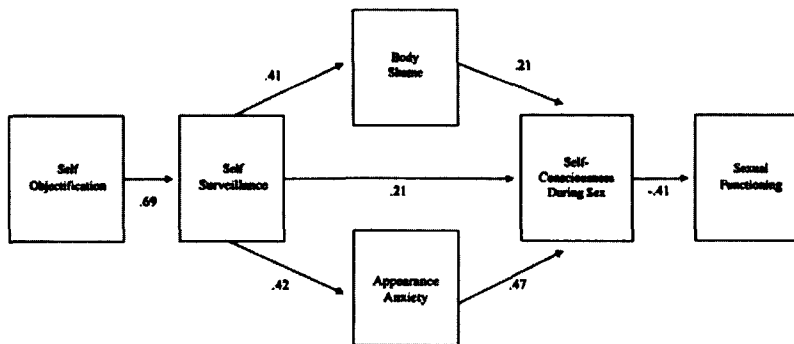


FIGURE 1. Path Diagram of Objectification Model

rent sexual functioning, $R = .504$, $F(6,45) = 2.56$, $p < .01$, with relationship satisfaction the only unique predictor, $\beta = .44$, $p < .01$.

DISCUSSION

In the main the present study was successful in applying the predictions of objectification theory (Fredrickson & Roberts, 1997) to the domain of sexual functioning. As research in women's sexuality has often been criticized for simply describing, rather than trying to explain and predict sexual phenomena (Andersen & Cyranowski, 1994), the present study represents a useful contribution to both research in objectification theory, and to research in the general area of women's sexuality.

Neither self-objectification nor self-surveillance was directly related to sexual functioning, but they were both positively correlated with body shame and appearance anxiety. This latter finding is consistent with previous studies that have found a significant relationship between self-objectification and these consequences among undergraduates (Greenleaf, 2005; McKinley & Hyde, 1996; Miner-Rubino et al., 2002; Moradi et al., 2005; Muehlenkamp & Saris-Baglama, 2002; Noll & Fredrickson, 1998; Tiggemann & Kuring, 2004; Tiggemann & Slater, 2001). Both body shame and appearance

anxiety were themselves significantly negatively correlated with sexual functioning when measured in general terms. This is in accordance with Cash et al.'s (2004) proposal that anxieties about one's body may decrease sexual functioning. Neither body shame nor appearance anxiety was significantly related to sexual functioning in the previous four weeks, perhaps as a function of the smaller number of currently sexually active participants.

The present study was also successful in demonstrating the need to include self-consciousness during sexual activity in a more comprehensive account of how self-objectification affects sexual functioning. First, both self-objectification and self-surveillance were significantly correlated with self-consciousness during sexual activity. Thus women who are generally concerned about how their body appears to others also experience this concern during sexual activity. Not surprisingly, women who habitually monitor their bodies in general (self-surveillance), also do so in the sexual context (self-consciousness during sexual activity). Second, body shame and appearance anxiety were significantly positively correlated with self-consciousness during sexual activity. This finding supports the suggestion of Fredrickson and Roberts (1997) that the shame and anxieties that a woman holds about her body may carry over into the sexual context and manifest as self-consciousness. Third, a significant negative correlation was found between self-consciousness during sexual activity and both general sexual functioning among the broader sample, and current sexual functioning among the sexually active participants. This result suggests that spending sexual activity being self-conscious about one's body is not likely to be conducive to high sexual functioning, supporting previous findings (Cash et al., 2004; Dove & Wiederman, 2000; Ellison, 2001). Finally, self-consciousness during sexual activity was shown to fully mediate the relationship between both body shame and appearance anxiety, and general sexual functioning, in explicit testing and in the path model. Thus the self-consciousness experienced by women during sexual activity has been identified as the mechanism by which their body shame and appearance anxiety affect their overall sexual functioning. This result is broadly consistent with cognitive-behavioral models of sexual dysfunction (Purdon & Holdaway, 2006) and suggests that self-consciousness about the body may be an important target in the treatment of female sexual difficulties.

The results of the path analysis (Figure 1) provide stronger support for the causal relationships proposed by objectification theory, whereby self-objectification leads to self-surveillance, which in turn leads to increased body shame and appearance anxiety, which results in greater self-consciousness during sexual activity, and finally poorer sexual functioning. The positioning of body shame and appearance anxiety between self-objectification and self-consciousness during sexual activity mirrors previous findings for disordered eating as the outcome (Greenleaf, 2005; McKinley & Hyde, 1996; Moradi et al., 2005; Noll & Fredrickson, 1998; Tiggemann & Lynch, 2001; Tiggemann & Slater, 2001). However, in contrast to the findings for disordered eating, the present study demonstrates a stronger pathway via appearance anxiety than via body shame, as has also been found in one study of depressed mood (Tiggemann & Kuring, 2004). This suggests that the anxiety surrounding appearance may be a more potent disruptor of sexual functioning than is body shame, which may be more relevant to disordered eating. Taken together, the results offer strong support to objectification theory as a useful framework for viewing women's sexual functioning.

The study also attempted to examine self-objectification and sexual functioning within a relationship context by measuring relationship status and satisfaction. In accord with the finding of Wiederman (2000), participants in an exclusive relationship had significantly lower levels of self-consciousness during sexual activity than participants currently not in a relationship. This is consistent with Wiederman's (2000) suggestion that with experience women can habituate and become less concerned about their appearance during sex. Being in a relationship might also confer a less judgemental context. Future research might usefully identify which aspects of being in a relationship lead to less self-consciousness during sexual activity.

For those participants within an exclusive relationship, relationship satisfaction was not directly related to self-consciousness during sex. It was, on the other hand, directly related to sexual functioning. The importance of relationship satisfaction was reinforced by the results of the regression analyses, where relationship satisfaction emerged as the only unique predictor of sexual functioning when all variables were included. Interestingly, this was the only relationship to hold more strongly for current sexual function than for general

sexual function. The result is consistent with research that has suggested that a woman's satisfaction in her relationship with her partner is particularly important in determining her sexual functioning (Byers, 2001). Future research might attempt to further examine how intimate relationships affect the relations between the components of objectification theory and sexual functioning. The use of more detailed measures of relationship satisfaction, and the examination of specific aspects of intimate relationships such as communication about sexual needs and desires, may contribute to increased understanding of the factors leading to sexual functioning.

The results of the present study need to be interpreted within a number of limitations. First, the sample was relatively small and one of convenience, that may have been biased toward women who were more comfortable discussing sexual activity. Second, the sample consisted of undergraduate students and hence was somewhat restricted in age and education level. Nevertheless, body image and sexual function are very important issues for this group. Third, only just over half the sample were able to answer the current sexual activity questions. Although unlikely, the possibility that some women opted not to answer because of the personal nature of this information cannot be ruled out. Future research might recruit larger and more heterogeneous samples of sexually active women, and also target specific populations such as older women and lesbian women. Finally, although path analysis (like other structural models) can test the strength of causal pathways proposed on the basis of an underlying theoretical model (here objectification theory), the study is still correlational in design. Hence it is possible that relationships may be reciprocal or run in the opposite direction. Only longitudinal or experimental designs could answer these questions of causal precedence with any greater confidence.

In conclusion, the present study has made a contribution in several ways. First, it represents the first study to successfully apply the specific predictions of objectification theory to the domain of sexual functioning. In so doing, the study has demonstrated that the variables proposed by objectification theory have substantial influence on levels of sexual functioning, in addition to disordered eating and depressed mood. This extends the realm of the theory's applicability considerably. Second, it demonstrated the importance of self-consciousness during sexual activity as a mediating variable and one

which might be targeted in the treatment of sexual difficulties. Third, it identified relationship status and relationship satisfaction as additional factors in women's sexual self-consciousness and functioning. Thus the present study has extended research in the area of objectification theory by applying the framework to a new domain, and in the process, has furthered our understanding of female sexual functioning.

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