A TEST OF OBJECTIFICATION THEORY WITH LESBIAN WOMEN

Holly B. Kozee and Tracy L. Tylka
The Ohio State University

This study extends research on objectification theory as it applies to eating disorder symptomatology by examining whether its tenets generalize to women identifying as lesbian. Lesbian women (N = 181) and a comparison sample of heterosexual women (N = 196) completed measures of objectification theory constructs (interpersonal sexual objectification, body surveillance, body shame, interoceptive awareness, disordered eating). The model of objectification theory was tested separately for lesbian and heterosexual participants. Path analyses revealed that this model provided a poor fit to the data for the lesbian sample, whereas it provided an excellent fit to the data for the heterosexual sample. Based on the data from the lesbian participants, an exploratory model was evaluated. Overall, findings suggested that the interrelationships among the objectification theory constructs were different and more complex for the lesbian participants than for the heterosexual participants.

In the contemporary Western world, the relationship that a woman has with her body can have profound effects on her professional, political, and personal life (Wolf, 1991). This relationship often is adversely impacted by sexual objectification, which is defined as society's treatment of the female body as a sexual object (Kaschak, 1992; Pipher, 1994). In sexual objectification, a woman's body is reduced to its parts or functions, with the misperception that those parts or functions are capable of representing the woman as a whole (Bartky, 1990). Two central forms of sexual objectification are body evaluation (e.g., gazing at a woman's body and body parts) and unwanted explicit sexual advances (e.g., touching a woman against her will). Being sexually objectified by others could lead to women treating themselves as objects to be looked at and evaluated, a distinct process referred to as self-objectification (Bartky, 1990; de Beauvoir, 1952).

Because our society promulgates the thin-ideal standard as the definition of beauty for women and equates women's worth with the extent to which they meet this standard, sexual objectification is believed to contribute to women's eating disorder symptomatology (Gilbert, Keery, & Thompson, 2005; Morry & Staska, 2001; Wolf, 1991). The influence of sexual objectification on women's eating disorder symptomatology, however, is thought to be indirect in that several variables account for this association. In objectification theory, Fredrickson and Roberts (1997) detail the process by which sexual objectification is related to disordered eating; a representation of this process is presented in Figure 1.

Objectification theory posits that encounters with sexual objectification via media outlets and interpersonal relationships encourage girls and women to self-objectify, in which they habitually monitor their body and outer appearance (McKinley & Hyde, 1996; Moradi, Dirks, & Matteson, 2005; Piran & Cormier, 2005; Tylka & Hill, 2004). As proposed by objectification theory, self-objectification directly leads to: (a) body shame, as women perceive themselves falling short of the cultural thin-ideal body shape; (b) decreased awareness of internal bodily states such as hunger, satey, and emotions; (c) reduced concentration or flow for nonappearance related tasks (i.e., challenging mental and physical activities); and (d) appearance and safety anxiety, as women realize that societal benefits are contingent on their attractiveness and that they could be targets of unwanted explicit sexual advances (Fredrickson & Roberts, 1997, p. 153). These four variables are believed to directly contribute to women's eating disorder symptomatology. Since its inception, many researchers have investigated the tenets of objectification theory. Experimentally manipulating the salience of self-objectification by having women try on swimsuits or sweaters, Fredrickson, Roberts, Noll,
Quinn, and Twenge (1998) found that self-objectification was related more strongly to body shame for women who tried on swimsuits than for women who tried on sweaters. In two samples of college women, Noll and Fredrickson (1998) found that self-objectification influenced disordered eating both directly and indirectly through body shame. Thus, although self-objectification was related to greater body shame, and body shame was related to greater disordered eating, self-objectification also contributed to disordered eating. Yet, when additional variables central to objectification theory have been included within structural models and tested with college women, body shame (Moradi et al., 2005; Tiggemann & Slater, 2001) completely explained the association between self-objectification and disordered eating. Research has further indicated that body shame contributes to lower interoceptive awareness, and both variables are associated with disordered eating (Tylka & Hill, 2004). Although appearance anxiety and peak motivational states are constructs specified in objectification theory, researchers (e.g., Slater & Tiggemann, 2002; Tiggemann & Slater, 2001) have not found these variables to contribute to disordered eating above and beyond that of body shame.

Within the more comprehensive examinations of the objectification theory framework, only Tylka and Hill (2004) and Moradi et al. (2005) examined interpersonal sexual objectification as a construct within their models. Inclusion of interpersonal sexual objectification within models of objectification theory permits the exploration of (a) whether sexual objectification contributes to self-objectification and (b) whether self-objectification accounts for the relationships between interpersonal sexual objectification and body shame, interoceptive awareness, and eating disorder symptomatology. Both Tylka and Hill (2004) and Moradi et al. (2005) found that interpersonal sexual objectification contributed to self-objectification within their models. Using women’s perceived pressure for thinness as the indicator of interpersonal sexual objectification, Tylka and Hill (2004) also uncovered that self-objectification (i.e., body surveillance) completely accounted for the relationship between pressure for thinness and eating disorder symptomatology, but only partially accounted for the relationship between pressure for thinness and body shame. Using a more general measure of interpersonal sexual objectification, Moradi et al. (2005) found that self-objectification (i.e., body surveillance and internalization of the thin-ideal) fully explained the relationship between reported sexual objectification experiences and body shame. Moradi and colleagues (2005) further revealed that self-objectification and body shame fully explained the relationship between reported sexual objectification experiences and disordered eating.

Research has supported many of objectification theory’s proposed constructs and links, strengthening its recognition as a viable model of women’s eating disorder symptomatology. Most of these findings, however, are based on samples of predominantly heterosexual, Caucasian, young adult U.S. women. Research exploring the constructs and links of objectification theory with more diverse populations would provide information about the generalizability of this theory to marginalized groups. According to Fredrickson and Roberts (1997), belonging to a particular subculture that does not hold the same thin-ideal values as Western culture “may mitigate or protect certain subgroups of women against the negative psychological repercussions that we link to sexual objectification” (p. 197).

To our knowledge, no published study to date has examined a comprehensive model of disordered eating with lesbian women. Such research is important because lesbian women have been found to report only slightly lower levels of eating disorder symptomatology than heterosexual women (Owens, Hughes, & Owens-Nicholson, 2003).
Therefore, the purpose of the present study was to add to the research on objectification theory in its prediction of disordered eating by assessing whether its theoretical pathways are similar for college women who identify as lesbian and college women who identify as heterosexual. A lesbian orientation may impact women’s body attitudes (e.g., beliefs about attractiveness, body monitoring, and body shame) and eating habits in ways that are not accounted for by the current objectification theory framework.

In determining how objectification theory may apply to lesbian women, we consulted the theoretical and empirical literature pertaining to lesbian women’s body image and eating disorder symptomatology. Although this literature does not specifically detail how the pathways specified in objectification theory may be similar or different for lesbian and heterosexual women, it does offer two main perspectives on the associations between sexual objectification, body attitudes, and eating behaviors for lesbian women. The first perspective has suggested that the traditional lesbian ideology rejects the thin-ideal body shape promoted by Western culture and includes an awareness of sexism and heterosexism (Brown, 1987; Ojerholm & Rothblum, 1999). According to this perspective, lesbian women are less likely to internalize the thin-ideal cultural standard of beauty and more likely to contextualize interpersonal sexual objectification. Thus, lesbian women may be less likely to allow encounters with interpersonal sexual objectification to influence their body attitudes and eating behaviors (Brown, 1987). In support of this theory, some researchers have found that lesbian participants report more favorable body attitudes and lower eating disorder symptomatology than heterosexual participants (Lakkis, Ricciardelli, & Williams, 1999; Schneider, O’Leary, & Jenkins, 1995; Siever, 1994). Recently, Noffsinger-Frazier (2004) found that a lesbian identity protected women from self-objectification and internalization of the thin-ideal stereotype, which resulted in lower disordered eating practices.

According to the second perspective, lesbian women are exposed to and develop within the same culture as heterosexual women (Dworkin, 1989). Although the values of the lesbian subculture (e.g., feminist consciousness, body acceptance) may lead many lesbian women to disagree with the thin-ideal beauty standards of the dominant culture, sexual objectification is so pervasive that it impacts all women, including those women who identify as lesbian (Dworkin, 1989; Fredrickson & Roberts, 1997; Swin, Hyers, Cohen, & Ferguson, 2001). Because the development of sexual orientation identity typically occurs in late adolescence or early adulthood (Cass, 1979), lesbian women are exposed to these beauty ideals during the earlier stages of their lives, unmitigated by the theorized protections of the lesbian subculture. Furthermore, lesbian women live and function within the dominant culture’s heterosexist framework, and “privilege and power comes with an acceptable, i.e., male defined, appearance” (Dworkin, 1989, p. 33). Even though lesbian women may not personally endorse the thin-ideal beauty standard, being thin is socially adaptive. Thus, they also may experience body shame and restrict their eating (Cogan, 1999).

Research also has supported this perspective. Share and Mintz (2002) found that lesbian participants, when compared with heterosexual participants, reported lower levels of internalization of the thin-ideal standard but similar levels of body esteem and disordered eating. In a meta-analysis of 15 studies that compared lesbian and heterosexual women’s body satisfaction, Morrison, Morrison, and Sager (2004) found that lesbian participants displayed only slightly greater body satisfaction than heterosexual participants and concluded that body dissatisfaction appears to be normative for both heterosexual and lesbian women. Furthermore, Hill (2003) found that experiences with cultural sexual objectification were positively related to self-objectification (e.g., body surveillance) for both lesbian and heterosexual women.

The model based on the objectification theory framework that we tested is presented in Figure 2. Because interpersonal sexual objectification, self-objectification via body surveillance, body shame, and interoceptive awareness have received empirical support as constructs within objectification theory as it relates to disordered eating (e.g., Tylka & Hill, 2004), they were included within our model. Given the fact that appearance anxiety and flow experiences have not received similar empirical support (e.g., Slater & Tiggemann, 2002; Tiggemann & Slater, 2001), we did not include these variables within our model. Although not specified in objectification theory, we tested a path from body shame to interoceptive awareness because we predicted that women who feel ashamed of their bodies try to decrease this shame by suppressing their internal hunger and satiety cues in an attempt to lose weight (Tylka & Hill, 2004). We

---

**Fig. 2.** Model tested in the present study.
tested this model separately for lesbian and heterosexual participants; the sample of heterosexual participants served as a comparison group from which to evaluate similarities and differences in the examination of objectification theory. In accordance with Moradi et al.’s (2005) and Tylka and Hill’s (2004) research, we hypothesized that this model would provide a good fit to the data for our comparison sample of heterosexual women. Given that the literature is sparse and contradictory with regard to whether sexual objectification impacts lesbian women in a similar fashion as heterosexual women, we were uncertain whether the objectification theory model would fit the data for our sample of lesbian women. If this model did not provide a good fit to their data, we planned to examine these data within an exploratory model.

**METHOD**

**Participants and Procedure**

Lesbian participants. An e-mail describing the study was sent to directors of Lesbian, Gay, Bisexual, and Transgender (LGBT) student services and leaders of student groups at universities and colleges throughout the United States. The e-mail requested that the director or student leader include an advertisement describing the study in any newsletter or Listserv that their group distributed. The advertisement stated that the purpose of the study was to explore the relationships between how others react to their bodies, their body attitudes, and their eating habits and contained the URL where the study was located. Interested participants could click the link to be taken directly to the study. Survey Monkey, an Internet survey software company, provided the URL and server space for the data to be stored temporarily until administration was completed. Before beginning the study, participants were shown an informed consent statement and asked to click a box to indicate their consent. Following completion of the measures, participants were debriefed and given the researchers’ contact information. Although no identifying information was collected, participants were offered the opportunity to enter their e-mail address, kept separate from their responses, into a raffle for $50.

Several strategies were utilized to minimize the likelihood that fallacious data were obtained. As suggested by Schmidt (1997), the date, time, and geographic origin of the responses were examined to ensure that no duplicate surveys were submitted. One set of duplicates was found and removed from the data set. To control for random responding and inattentiveness, 10 items were placed throughout the survey that either asked the participants to choose a specific response choice (e.g., “Please choose ‘rarely’ for this question”) or to not respond to filler items (e.g., “Please do not answer this item”). One participant’s survey was not included in the data set, as she did not comply with this request. Two items asked participants to identify their sexual orientation and gender identification to screen out nonlesbian participants.

Responses from five women who did not complete at least 90% of all given measures were not entered into the data set. Only women who passed the validity checks were included within the data set. The final data set included responses from 181 lesbian U.S. college women who ranged in age from 18 to 26 years ($M = 21.2$, $SD = 1.9$). These women reported European heritage (52%), Latin heritage (4%), African heritage (2%), Native U.S. American heritage (2%), or Asian heritage (1%). Nine percent identified as multiracial. They indicated that they were first-year students (7%), sophomores (17%), juniors (20%), seniors (31%), postbaccalaureate students (6%), or graduate students (17%). Most geographic regions of the United States were represented within this sample; participants reported that they lived in the Midwest (54%), Northeast (23%), West (5%), South (2%), East (6%), Southeast (7%), or Northwest (3%). Participants described themselves as middle class (50%), working class (26%), upper-middle class (22%), or upper class (3%). Most reported being single (53%), whereas 47% reported being in a long-term relationship.

Sample of heterosexual women. Heterosexual women enrolled in an introductory psychology course at The Ohio State University were recruited via an online advertisement of the study on the psychology department’s Web site. Each woman was given the packet of measures, informed of the purpose of the study, and guaranteed that her responses would remain anonymous. After obtaining participants’ informed consent, they filled out the surveys in a classroom setting. Each survey session contained between 5 and 25 participants. After completion of the measures, participants were debriefed and given the contact information of the researchers. They received course credit for their involvement.

Responses from four women who did not complete at least 90% of all given measures or did not pass the validity checks were not entered into the data set. The heterosexual women included in the data set ($n = 196$) ranged in age from 18 to 22 years ($M = 18.7$, $SD = 0.7$) and reported European heritage (80%), African heritage (11%), Latin heritage (4%), or Asian heritage (3%). Two percent identified as multiracial. They were first-year students (89%), sophomores (7%), juniors (3%), or seniors (2%). They described their socioeconomic status as middle class (59%), upper-middle class (29%), working class (12%), or upper class (2%). Most reported being single (77%), whereas 23% reported being in a long-term relationship.

**Variables and Instruments**

Interpersonal sexual objectification. The Interpersonal Sexual Objectification Scale (ISOS; Kozee, Tylka, Augustus-Horvath, & Denchik, 2005) was used to determine the extent to which women have experienced interpersonal
sexual objectification (i.e., body evaluation and unwanted explicit sexual advances) throughout their lifetime. The scale’s 15 items (e.g., “How often have you felt like or known that someone was evaluating your physical appearance?”) were rated on a 5-point scale ranging from 1 (never) to 5 (almost always). Items were summed, and higher scores indicate higher levels of objectification. The ISOS has been found to yield reliable scores among three samples of college women; its internal consistency (Cronbach’s α) ranged from .90 to .91, and its scores were consistent over a 3-week period (r = .84; Kozee et al., 2005). Supporting its construct validity, ISOS scores were strongly related to sexist events, slightly-to-moderately related to indices of self-objectification (i.e., body surveillance and internalization of the thin-ideal), and unrelated to social desirability (Kozee et al., 2005). Its incremental validity also was supported, as it predicted self-objectification and body shame above and beyond the variance accounted for by general sexist events (Kozee et al., 2005). For the present study, Cronbach’s α was .90 for the lesbian participants and .91 for the heterosexual participants.

Self-objectification via body surveillance. Body surveillance was measured using the 5-item body surveillance subscale of the Objectified Body Consciousness Scale (OBC; McKinley & Hyde, 1996). Items (e.g., “During the day, I think about how I look many times”) are rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) and averaged. Higher scores indicate greater body surveillance. McKinley and Hyde (1996) reported that the body surveillance scores were internally consistent (α = .89), stable over a 2-week period (r = .79), and demonstrated evidence of construct validity by its strong relation to public self-consciousness. For the present study, Cronbach’s α was .87 for the lesbian participants and .88 for the heterosexual participants.

Body shame. Body shame was measured using the 8-item body shame subscale of the OBC (McKinley & Hyde, 1996). The scale’s items (e.g., “I feel ashamed of myself when I haven’t made the effort to look my best”) are rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) and averaged. Higher scores indicate greater body shame. Its scores have been found to be internally consistent (α = .75), stable over a 2-week period (r = .79), and strongly related in a negative direction to body esteem (McKinley & Hyde, 1996). For the present study, Cronbach’s α was .88 for the lesbian participants and .86 for the heterosexual participants.

Interoceptive awareness. The 10-item Interoceptive Awareness subscale of the Eating Disorder Inventory-2 (Garner, 1991) was used to assess participants’ awareness of their emotions and hunger/satiety signals. This subscale does not measure eating disorder symptomatology. The scale’s items (e.g., “I get confused as to whether or not I am hungry”) are rated on a 6-point scale ranging from 1 (never true of me) to 6 (always true of me). Garner (1991) recommended that item responses never true of me, seldom true of me, and sometimes true of me receive a score of 0, and the responses often true of me, very often true of me, and always true of me receive scores of 1, 2, and 3, respectively. However, this method restricts the range of responses and could lead to skewness in the distribution of scores, which in turn would violate the assumptions necessary for structural equation modeling (Tabachnick & Fidell, 1996). Therefore, the full range of responses was retained and then averaged, allowing scores of 1 to 6. Other researchers (e.g., Tylka & Hill, 2004; Tylka & Subich, 2004) have used this scoring method with college women. Higher scores indicate lower interoceptive awareness. Among samples of college women, this subscale was internally consistent (α = .81; Garner & Olmsted, 1984) and yielded consistent scores over a 3-week period (r = .85; Wear & Pratz, 1987). Its construct validity is supported with college women, as it was strongly related to difficulty identifying feelings (Tylka & Subich, 2004). For the present study, Cronbach’s α was .85 for the lesbian participants and .88 for the heterosexual participants.

Eating disorder symptomatology. The Eating Attitudes Test-26 (EAT-26; Garner, Olmstead, Bohr, & Garfinkel, 1982) was used to assess women’s levels of eating disorder symptomatology. Researchers (e.g., Mazzeo, 1999) have suggested that it can be used as a continuous measure in nonclinical samples of women. The scale’s 26 items (e.g., “I avoid eating when I am hungry”) are rated on a 6-point scale ranging from 1 (never) to 6 (always). Garner et al. (1982) recommended that the responses never, rarely, and sometimes receive a score of 0, and the responses often, very often, and always receive scores of 1, 2, and 3, respectively. However, this scoring method likely would lead to skewness in the distribution of scores due to the relatively low base rate of clinical eating disorders. Thus, in the statistical analyses reported in the present study, the full range of responses was retained, and total scores (i.e., ranging from 26 to 156) were equal to the sum of the responses to all items, with higher scores reflecting greater symptomatology. Among college women, the EAT-26, when scored continuously, has been found to be internally consistent (α = .92; Moradi et al., 2005), stable over a 3-week period (r = .86; Mazzeo, 1999), and strongly related to bulimic symptomatology and drive for thinness (Brookings & Wilson, 1994). For the present study, Cronbach’s α was .89 for the lesbian participants and .93 for the heterosexual participants.

RESULTS

First, we determined whether the lesbian and heterosexual samples differed in the demographic variables examined (i.e., age, ethnicity, class year, relationship status, and socioeconomic identification). If sample differences
emerged for a demographic variable, we examined whether it was associated with any of the five model variables for the entire sample of participants (N = 377). Due to the low number of participants representing certain ethnic heritages, ethnicity was classified as 0 = U.S. women with European heritage and 1 = U.S. women of color. Because of the number of comparisons, the Bonferroni adjustment was used (i.e., p values were set at .01 or .05/5). Findings revealed that the lesbian and heterosexual samples differed in age, t(375) = −19.21, p < .001, class year, χ²(3) = 255.74, p < .001, relationship status (single versus long-term relationship), χ²(1) = −21.81, p < .001, and socioeconomic identification, χ²(3) = 12.21, p < .01, but did not differ in ethnicity. Thus, we explored the relationships of age, class year, relationship status, and socioeconomic status to the five model variables. Because of the large number of correlations examined, p values were set at .003 (i.e., .05/20). No significant differences emerged between these demographic variables and the model variables (p > .003 for all). Thus, although there were differences in age, class year, relationship status, and socioeconomic identification between the lesbian and heterosexual samples, these demographic variables were not significantly related to the model variables.

Next, instrument means, standard deviations, and interrelations were examined separately for the samples of lesbian and heterosexual participants; these values are presented in Table 1. For each sample, the total scores for each scale were normally distributed, and the full range of response choices was represented. Five independent samples t tests were performed to determine whether lesbian participants differed from heterosexual participants in their levels of the model variables. Because of the number of comparisons, p values were set at .01 (i.e., .05/5). Results indicated that lesbian participants scored significantly higher on body surveillance, t(375) = −4.35, p < .01, and significantly lower on eating disorder symptomatology, t(375) = 2.63, p < .01, than heterosexual participants. No significant group differences were found on interpersonal sexual objectification, body shame, or interoceptive awareness.

Path analysis procedures contained within the Mplus program (Muthén & Muthén, 2001) were used to determine whether the model presented in Figure 2 provided a good fit to the data for lesbian participants and for heterosexual participants. The number of women in each sample exceeded the 110 participants required to estimate this model (as determined by the conservative cases-to-parameter ratio of 10 participants for each model parameter estimated; Hu & Bentler, 1999).

Total scores on the measures served as the observed variables in the model. Because all measures were continuous, the Maximum Likelihood method of model estimation was used. The adequacy of fit was determined by the four indices calculated by Mplus and recommended by Hu and Bentler (1999): the comparative fit index (CFI), the Tucker-Lewis Index (TLI)—also known as the nonnormed fit index—the standardized root-mean square residual (SRMR), and the root-mean square error of approximation (RMSEA). As recommended by Hu and Bentler (1995, 1999), models with CFI and TLI values at or above .95 and SRMR and RMSEA values at or below .05 indicate an excellent fit to the data, whereas CFI and TLI values ranging from .90 to .94 and SRMR and RMSEA values ranging from .06 to .10 indicate an adequate fit to the data. For each analysis, we specified Mplus to detect modification indices above 5.0 because a modification index above 5.0 for an unexamined path suggests that the path should be estimated as part of the model (Kelloway, 1998).

**Table 1**

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Lesbian women (N = 181)</th>
<th>Heterosexual women (N = 196)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lifetime ISOS</td>
<td>M = 33.99, SD = 8.87</td>
<td>M = 33.47, SD = 12.12</td>
<td>——</td>
<td>.30**</td>
<td>.34**</td>
<td>.27**</td>
<td>.41**</td>
</tr>
<tr>
<td>2. OBC-Body surveillance</td>
<td>M = 4.36, SD = 1.15</td>
<td>M = 3.75, SD = 1.52</td>
<td>.64**</td>
<td>——</td>
<td>.60**</td>
<td>.18</td>
<td>.55**</td>
</tr>
<tr>
<td>3. OBC-Body shame</td>
<td>M = 3.52, SD = 1.39</td>
<td>M = 3.50, SD = 1.22</td>
<td>.50**</td>
<td>.73**</td>
<td>——</td>
<td>.43**</td>
<td>.70**</td>
</tr>
<tr>
<td>4. EDI-2-Interoceptive</td>
<td>M = 2.91, SD = .78</td>
<td>M = 2.70, SD = .87</td>
<td>.31**</td>
<td>.42**</td>
<td>.60**</td>
<td>——</td>
<td>.35**</td>
</tr>
<tr>
<td>awareness</td>
<td>M = 61.24, SD = 17.78</td>
<td>M = 66.53, SD = 20.94</td>
<td>.36**</td>
<td>.52**</td>
<td>.65**</td>
<td>.68**</td>
<td>——</td>
</tr>
</tbody>
</table>

Note. Instrument correlations for the lesbian sample are presented above the diagonal. Instrument correlations for the heterosexual sample are presented below the diagonal. ISOS = Interpersonal Sexual Objectification Scale, OBC = Objectified Body Consciousness Scale, EDI-2 = Eating Disorder Inventory-2, EAT-26 = Eating Attitudes Test-26.

*aMean differences between the lesbian and heterosexual samples were noted for these instruments.

*p < .05; **p < .01.
paths were significant \( (p < .05) \), except for the path from body surveillance to interoceptive awareness. Following recommendations by researchers (e.g., Kelloway, 1998), we deleted this nonsignificant path and reanalyzed the model. The fit statistics remained excellent \( \text{CFI} = 1.00, \ TLI = 1.01, \ SRMR = .02, \ RMSEA = .00 \). The fit of the model did not change, \( \chi^2_{\text{difference}}(1) = 0.25, \ ns \), thereby resulting in a more parsimonious model, and no modification index exceeded 5.0 (range = .01 to 1.18). This trimmed model accounted for 58.0% of the variance in heterosexual women’s eating disorder symptomatology, and the path coefficients generated from analyzing this model are presented in Figure 3.

Sample of Lesbian Participants

The results indicated a poor fit of the lesbian participants’ data to the model presented in Figure 2 \( (\text{CFI} = .89, \ TLI = .75, \ SRMR = .11, \ RMSEA = .20) \). Four modification indices exceeded 5.0 (i.e., paths from interpersonal sexual objectification to body shame, interoceptive awareness, and eating disorder symptomatology; the path from body surveillance to eating disorder symptomatology). We reanalyzed the model including these paths. Because this revised model was fully saturated, all fit statistics indicated an excellent fit to the data \( (\text{CFI} = 1.00, \ TLI = 1.00, \ SRMR = .00, \ RMSEA = .00) \). All model paths were significant \( (p < .05) \) except the path from body surveillance to interoceptive awareness and the path from interoceptive awareness to eating disorder symptomatology. Thus, we deleted the nonsignificant paths and reanalyzed the model. Deleting these paths resulted in a more parsimonious model, as it did not significantly change its fit. Fit statistics for this trimmed model ranged from adequate \( (\text{RMSEA} = .09, \ TLI = .94) \) to excellent \( (\text{CFI} = .99, \ SRMR = .03) \), and no modification index exceeded 5.0 (all indices were 2.71). This revised and trimmed model accounted for 54.1% of the variance in lesbian participants’ eating disorder symptomatology. The path coefficients for this exploratory model are presented in Figure 4.

Last, we examined whether the fit of the trimmed model presented in Figure 3 (based on the heterosexual women’s data) would improve if it included the four additional paths found to be significant with the lesbian sample. Model fit did not improve significantly when paths from interpersonal sexual objectification to body shame, interoceptive awareness, and eating disorder symptomatology were added to this model or when a path from body surveillance to eating disorder symptomatology was added to this model. This model also suggested a number of indirect links, which, if significant, would suggest

Fig. 3. Trimmed model and path coefficients obtained by analyzing the data from the heterosexual sample. In this analysis of the model, nonsignificant paths were excluded. \(^*p < .05\).

Fig. 4. Trimmed model and path coefficients obtained by analyzing the data from the lesbian sample. In this analysis of the model, significant paths (uncovered via modification indices) that were not specified in objectification theory were included, while nonsignificant paths were excluded; thus, this model should be considered exploratory. \(^*p < .05\).
mediator effects. We used Sobel’s formula to determine whether indirect effects were significantly different from zero. Unlike the data from the lesbian sample, data from the sample of heterosexual women indicated that: (a) the influence of interpersonal sexual objectification on body shame was fully mediated by body surveillance (indirect link = .17, \( z = 3.98, p < .001 \)), (b) interpersonal sexual objectification did not directly predict unique variance in interoceptive awareness, (c) the influence of interpersonal sexual objectification on eating disorder symptomatology was fully mediated by body surveillance (indirect link = .06, \( z = 2.42, p < .05 \)) and body shame (indirect link = .12, \( z = 2.70, p < .00 \)), and (d) the influence of body surveillance on eating disorder symptomatology was fully mediated by body shame (indirect link = .28, \( z = 5.67, p < .001 \)).

**DISCUSSION**

The present study examined whether the tenets of objectification theory (Fredrickson & Roberts, 1997), as it predicts eating disorder symptomatology, generalizes to a sample of lesbian college women. We found that the model of objectification theory provided an excellent fit to the data for our comparison sample of heterosexual participants, thus replicating previous research. The model did not, however, provide a good fit to the data for our sample of lesbian participants. To more closely examine and understand the lesbian participants’ experiences, we modified the objectification theory model and generated an exploratory model based on their data. Because this model is based on one sample, it must be interpreted with caution and requires confirmation with other samples of lesbian women (Weston & Gore, 2006). Our findings suggest that the interrelationships among the objectification theory variables could be different from and more complex for lesbian women than for heterosexual women. There are interesting and noteworthy differences such as the lower level of eating disorder symptomatology and the greater level of body surveillance for the lesbian participants compared to the heterosexual participants. These differences may contribute to future models of objectification theory as applied to lesbian women.

Our results do not provide complete support for either perspective offered on the associations among sexual objectification, body attitudes, and eating behaviors for lesbian women. Our finding that lesbian participants reported lower levels of eating disorder symptomatology than did heterosexual participants is consistent with the suggestion that a lesbian identity protects women from eating disorder symptomatology due to lesbians’ higher levels of feminist consciousness and resistance to following gender-role messages that instruct women to be thin in the name of femininity (Brown, 1987; Guille & Chrisler, 1999; Lakkis et al., 1999; Noffsinger-Frazier, 2004; Schneider et al., 1995; Siever, 1994). Indeed, feminist consciousness has been found to protect women from eating disorder symptomatology (Sabik & Tylka, 2006). Yet, our lesbian and heterosexual samples reported similar levels of interpersonal sexual objectification, body shame, and interoceptive awareness, indicating that lesbians are just as likely to be bound to Western culture’s beauty expectations as heterosexual women (Cogan, 1999; Dworkin, 1989). The higher levels of body surveillance reported by lesbian participants suggest that lesbian women may attend to their appearance and monitor their bodies even more than heterosexual women. Perhaps women who have a lesbian identity are less likely to engage in maladaptive eating behaviors because they perceive that these behaviors are more consistent with behaviors heterosexual women adopt specifically to attract men (Siever, 1994). Researchers could examine this hypothesis. Lesbian women may have reported higher levels of body surveillance because their sexual orientation is inconsistent with the dominant culture’s heterosexist framework that offers privileges for those who conform to this framework (Dworkin, 1989). Lesbian women, on average, may have to monitor their appearance to a greater degree than heterosexual women to avoid being dismissed or derided within this framework. However, it should be noted that Hill (2003) found that lesbian women reported lower body surveillance than did heterosexual women. Thus, further research is needed to clarify the discrepancy between Hill’s and our findings.

Although speculative, it appears that sexual objectification may directly influence body shame, interoceptive awareness, and eating disorder symptomatology for lesbian women, whereas sexual objectification contributes to these variables indirectly (through body surveillance and/or body shame) for heterosexual women. Another interesting preliminary finding is that body surveillance but not interoceptive awareness was directly associated with eating disorder symptomatology for lesbian women, whereas interoceptive awareness but not body surveillance was directly associated with eating disorder symptomatology for heterosexual women. We encourage researchers to evaluate whether our exploratory model generalizes to other samples of lesbian participants. Confirmation of these pathways for lesbian women would strengthen the confidence in this model and permit its interpretation. Also, researchers may want to incorporate and test other variables within this model (e.g., social support within the lesbian community, support from friends and family, internalized homophobia) to improve fit for lesbian women. Within models of eating disorder symptomatology, a positive lesbian identity and adequate social support have been found to be negatively associated with disordered eating (Joshua, 2003; Tylka & Subich, 2004).

Despite the contributions of the present study to the literature, it is important to address limitations. First, the strategies used to detect inattentiveness and random responding may not have controlled for all erroneous data. Furthermore, using different formats of data collection for
lesbian and heterosexual participants may have resulted in differences due to response styles. For example, all heterosexual women were in view of other women when completing their surveys, but it is unknown whether lesbian participants completed their surveys privately or in view of other women. The latter may have resulted in a lower reporting of negative characteristics. In addition, our lesbian and heterosexual samples differed in terms of age, class year, and relationship status. Although these demographic variables were not directly related to the model variables, they may have impacted the relationships among the model variables.

Second, we did not collect data on certain variables that could have affected our findings. We did not assess participants’ body mass index (BMI), which may have been related to levels of and associations between the model variables. Preliminary research has indicated that lesbian women, on average, have higher BMIs than heterosexual women (Owens et al., 2003). We did not control for women’s levels of social desirability either; even though responses to the questionnaires were anonymous, the participants could have felt that they were under scrutiny and may have been less than forthcoming when answering the items.

Third, the models we tested were limited in certain ways. Data were collected at a single point in time and, as a result, no causal claims can be made about the sequence of variables within the path analyses. These models were also based on homogeneous samples of women; most participants in both samples identified as young adult Caucasian middle-class U.S. college women. The lesbian sample was further restricted in that it included only members of LGBT organizations and women who had access to the Internet. Therefore, our results may not generalize to more diverse samples of women.

Despite these limitations, the present findings have implications for practitioners who work with women. Both lesbian and heterosexual participants who engage in body surveillance may suppress their awareness of internal bodily states to the extent that they feel ashamed of their bodies. This finding amplifies the need for careful intake assessments, such as ones which address body surveillance, interoceptive awareness, and body shame for all women, regardless of their sexual orientation. Practitioners must recognize that lesbian women, like heterosexual women, live in a culture that sexualizes and objectifies women’s bodies and impacts all women in a variety of ways. In sum, our finding that lesbian and heterosexual women had similar levels of interpersonal sexual objectification but that it impacted the model differently for lesbian participants highlights the importance for researchers and clinicians to assess interpersonal sexual objectification and understand its potential consequences for lesbian women.

REFERENCES


