

Objectification Theory Predicts College Women's Attitudes Toward Cosmetic Surgery

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Abstract

This study investigated cosmetic surgery attitudes within the framework of objectification theory. One hundred predominantly White, British undergraduate women completed self-report measures of impression management, global self-esteem, interpersonal sexual objectification, self-surveillance, body shame, and three components of cosmetic surgery attitudes. As expected, each of the objectification theory variables predicted greater consideration of having cosmetic surgery in the future. Also, as expected, sexual objectification and body shame uniquely predicted social motives for cosmetic surgery, whereas self-surveillance uniquely predicted intrapersonal motives for cosmetic surgery. These findings suggest that women's acceptance of cosmetic surgery as a way to manipulate physical appearance can be partially explained by the degree to which they view themselves through the lenses of sexual and self-objectification.

Keywords: cosmetic surgery, objectification theory, self-surveillance, body shame, sexual objectification

Introduction

The central purpose of the present research was to examine women's attitudes toward cosmetic surgery through the lens of objectification theory (Fredrickson & Roberts, 1997). Extending prior research on cosmetic surgery attitudes (Brown, Furnham, Glanville, & Swami, 2007; Henderson-King & Henderson-King, 2005; Sarwer et al., 2005; Swami, et al., 2008), the present study investigates objectification theory variables (i.e., sexual objectification, self-surveillance, body shame) as a specific set of interpersonal and intrapersonal factors that may be associated with women's endorsement of cosmetic surgery as an acceptable means of changing their physical appearance. Specifically, this cross-sectional investigation examines the relationship between objectification theory variables and cosmetic surgery attitudes among a sample of women living in the U.K., a cultural context within which women consistently report high levels of appearance concerns, sexual and self-objectification, and interest in cosmetic surgery (Calogero, 2009; Calogero, Park, Rahemtulla, & Williams, 2010; Calogero & Thompson, 2009a; Dittmar et al., 2000; Grogan 2008; McLaren, Kuh, Hardy, & Gauvin, 2004; Puwar, 2004; Swami, Chamorro-Premuzic, Bridges, & Furhman, 2009). This research provides a new test and application of objectification theory to the understanding of women's lived experiences in westernized societies.

Feminist scholars have discussed how the construction of women's bodies within particular social and cultural contexts determines the way that women's bodies will be viewed, evaluated, and treated (Bartky, 1990; Berger, 1972; de Beauvoir, 1952; Martin, 1987). Objectification theory, proposed by Fredrickson and Roberts (1997), considers the pervasive sexual objectification of

women in westernized societies as a macro-level context that produces a chain of negative micro-level consequences known to occur at a disproportionately higher rate among women. Sexual objectification occurs whenever a woman is reduced to and/or treated as a body or collection of body parts available for sexual use (Bartky, 1990). According to objectification theory, sexual objectification plays out most obviously in two arenas: actual interpersonal and social encounters (e.g., cat calls, checking out or gazing at women's bodies, sexual comments, harassment) and exposure to visual media that "spotlights" women's bodies and body parts. From this perspective, girls and women come to place excessive emphasis on physical appearance as a result of these sexual objectification practices, ultimately adopting an external observational standpoint on their bodies such that "they treat *themselves* as objects to be looked at and evaluated" (p. 177, emphasis in original). Adopting this particular vantage point on the self, referred to as self-objectification, requires women to chronically 'police' or self-monitor their bodies in anticipation of being evaluated based on their appearance. Typically referred to as self-surveillance (McKinley & Hyde, 1996; Tiggemann & Slater, 2001), this engagement in chronic body monitoring is a common behavioural manifestation of self-objectification. Given the myriad social and economic rewards women earn for their physical attractiveness (Dellinger & Williams, 1997; Eagly, Ashmore, Makhijani, & Longo, 1991), and in an effort to cope with incessant external pressures to meet beauty ideals (Calogero, Boroughs, & Thompson, 2007; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999), many women experience objectified relationships with their own bodies in the form of self-objectification and self-surveillance.

The intended focus of objectification theory was to explicate the consequences of sexual and self-objectification for women's lived experiences. Empirical studies have demonstrated that both interpersonal forms (Hill & Fischer, 2007; Kozee & Tylka, 2006;

Kozee, Tylka, Augustus-Horvath, & Denchik, 2007; Moradi, Dirks, & Matteson, 2005) and media forms (Harper & Tiggemann, 2008; Morry & Staska, 2001) of sexual objectification contribute to self-objectification. Moreover, there is strong evidence from studies of women across North America, Australia, and the U.K. indicating that self-objectification, and the concomitant self-surveillance, exact significant costs on women's subjective well-being (Breines, Crocker, & Garcia, 2008; Fairchild & Rudman, 2008) and cognitive performance (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Quinn, Kallen, Twenge, & Fredrickson, 2006), with a greater prevalence of self-harming behavior (Harell, Fredrickson, Pomerleau, Nolen-Hoeksema, 2006; Muehlenkamp, Swanson, & Brausch, 2005) and a disproportionately higher rate of mental health risks, including depression (Grabe, Hyde, & Lindberg, 2007; Tiggemann & Kuring, 2004), disordered eating (Calogero, Davis, & Thompson, 2005; Tylka & Hill, 2004), and sexual dysfunction (Calogero & Thompson, 2009b; Steer & Tiggemann, 2008). In particular, researchers have identified body shame—the degree to which women feel ashamed of their bodies when they perceive them as falling short of feminine beauty ideals (McKinley & Hyde, 1996)—as a key negative emotional consequence of self-objectification (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). Body shame consistently mediates the effects of self-objectification on well-being and mental health (Noll & Fredrickson, 1998; Quinn, Kallen, & Cathey, 2006; Tiggemann & Slater, 2001), and thus is a critical variable in the objectification theory framework.

In the present research, we submit that positive attitudes toward cosmetic surgery among women reflect another negative consequence stemming from the socio-cultural conditions that perpetuate the objectification of women's bodies. Indeed, the tremendous increase in elective cosmetic procedures (surgical and minimally invasive) over the past decade or more is due primarily to the disproportionately higher number of female patients who sought these treatments. Between 1992 and 2008, total cosmetic

procedures performed in the U.S. increased by 882%, with over \$10 billion spent on these procedures in 2008 (American Society of Plastic Surgeons [ASPS], 2009). This extreme growth in cosmetic procedures is not limited to the U.S.: Between 2003 and 2008, the number of surgical procedures performed in the U.K. more than tripled (British Association of Aesthetic and Plastic Surgeons [BAAPS], 2009). In both of these westernized societies, 91% of these procedures are performed routinely on women, whereas 9% are performed on men (ASPS, 2009). In addition to the significant depletion of women's economic resources (Hesse-Biber, Leavy, Quinn, & Zoino, 2006; Tiggemann & Rothblum, 1997), this high percentage of women undergoing cosmetic surgery is particularly troubling because of the numerous deleterious consequences associated with these procedures, which are well-known among cosmetic surgeons but virtually unknown among the general population, such as chronic pain, deadly infections, gangrene, nerve damage, loss of sensation, mutilated body parts, amputation, reoperation, cancer detection difficulty, suicide, and death (Haiken, 1997; Jeffreys, 2005; McLaughlin, Wise, & Lipworth, 2004; Wolf, 1991; Zones, 2000).

Researchers have linked a variety of interpersonal and intrapersonal variables to people's attitudes toward cosmetic surgery (Sarwer, Magee, & Clark, 2003; Sarwer, Wadden, Pertschuk, & Whitaker, 1998; Swami & Furnham, 2008), such as negative body image (Brown, Furnham, Glanville, & Swami, 2007; Markey & Markey, 2009), appearance-based self-esteem (Delinsky, 2005), attachment anxiety (Davis & Vernon, 2002), Big-Five personality traits (Swami, Chamorro-Premuzic, Bridges, & Furnham, 2009), previous personal or vicarious experiences with cosmetic surgery (Swami et al., 2008), intense-personal celebrity worship (Swami, Taylor, & Carvalho, 2009), materialism and parental attitudes (Henderson-King & Brooks, 2009), appearance-related teasing (Markey & Markey, 2009; Sarwer et al., 2003), internalized media appearance ideals (Sarwer et al., 2005; Sperry et al., 2009), and appearance-

based rejection sensitivity (Calogero, Park, et al., 2010; Park, Calogero, Harwin, & DiRaddo, 2009; Park, Calogero, Young, & DiRaddo, in press).

What sets the present research apart from this impressive body of work is our reliance on a systematic theoretical framework to explain why women undergo cosmetic surgery at a disproportionately higher rate than men. Whereas many of the aforementioned intrapsychic and interpersonal factors predicting cosmetic surgery attitudes could be similarly experienced by both women and men, it is well-documented that experiences of interpersonal sexual objectification (hereafter referred to as sexual objectification), self-surveillance (the behavioural manifestation of self-objectification), and body shame are part of many women's, but fewer men's, day-to-day lives (Bartky, 1990; Davis, 1990; Fredrickson & Roberts, 1997; Puwar, 2004; Swim, Hyers, Cohen, & Ferguson, 2001). Being routinely viewed and treated as an object for the pleasure of others, coming to view oneself as an object for this use, and feeling ashamed of the body when not meeting stringent appearance standards, may bring about a sort of psychic distancing between the self and the body that encourages women to support even further objectification of their bodies via elective surgical procedures.

We focus on three specific components of cosmetic surgery attitudes in the present study. First, researchers have theorized two broad motives that underpin people's support for cosmetic surgery: intrapersonal motives and social motives (Cash & Fleming, 2002; Henderson-King & Henderson-King, 2005). Intrapersonal motives emphasize the use of cosmetic surgery to manage one's self-image, alleviate feelings of inadequacy, and to feel better about oneself (Davis, 1995; Didie & Sarwer, 2003). From this perspective, it is acceptable to undergo cosmetic surgery to modify one's physical appearance if the purpose is self-motivated. Given that self-surveillance represents an internally-driven view of the self as a sexual object (Fredrickson & Roberts, 1997; McKinley & Hyde,

1996), we expected that higher self-surveillance would be associated with intrapersonal motives, reflecting the overvaluation of physical appearance to one's self-image. Social motives emphasize the use of cosmetic surgery to garner favourable evaluations from others (Davis, 1995; Henderson-King & Henderson-King, 2005), based on the notion that enhancing one's physical attractiveness to others brings social rewards (Eagly, Ashmore, Makhijani, & Longo, 1991; Englen-Maddox, 2006; Evans, 2003). From this perspective, it is acceptable to undergo cosmetic surgery to modify physical appearance if the purpose is to gain social currency. Given that sexual objectification and body shame are more closely linked to anticipated or actual social evaluations (Fredrickson & Roberts, 1997; Tangney, Miller, Flicker, & Barlow, 1996), we expected that more experiences of sexual objectification and higher body shame would be associated with social motives, reflecting the overvaluation of external observer's perspectives on one's physical appearance. In addition to these motives, we examined the degree to which people would consider undergoing cosmetic surgery in the future. Given that each of the three objectification theory variables call attention to the evaluation and appearance of women's bodies, we expected that all three variables would be associated with greater consideration of cosmetic surgery.

We also expected that these relationships would remain significant after controlling for global self-esteem and impression management. Global self-esteem, defined as a personal judgment of self-worth, is a well-known indicator of overall well-being (Harter, 1993) and linked to women's experiences of objectification and cosmetic surgery. Specifically, self-esteem has been negatively associated with experiences of sexual objectification (American Psychological Association Task Force on the Sexualization of Girls, 2007; Tylka & Subich, 2004), self-objectification and self-surveillance (Aubrey, 2006; Mercurio & Landry, 2008; Tolman, Impett, Tracy, & Michael, 2006), and body shame (Aubrey, 2006; Lowery et al., 2005; Mercurio & Landry, 2008). In other research,

however, women with high self-esteem who also strongly based their self-worth on their appearance reported greater well-being when they self-objectified compared to other women, in part because they felt less unattractive when they self-objectified (Brienes et al., 2008). In addition, lower trait (Swami, Chamorro-Premuzic, et al., 2009) and state (Henderson-King & Henderson-King, 2005) self-esteem have been associated with more positive attitudes toward cosmetic surgery. In addition, impression management (Leary & Kowalski, 1990; Paulhus, 1991), or the tendency to engage in socially desirable responding to control how one appears to others, may be relevant to women's experiences of objectification and cosmetic surgery. For example, individuals with a stronger tendency to control how they appear to others may be more sensitive to experiences of objectification and/or hold more positive attitudes toward cosmetic surgery if they believe these procedures would garner more favourable evaluations from others. In sum, because both global self-esteem and impression management are broad motivational variables potentially implicated in women's experiences of objectification and cosmetic surgery, we included them as covariates in our analyses.

Our specific hypotheses are as follows:

H1: Sexual objectification, self-surveillance, and body shame should positively correlate with intrapersonal motives, social motives, and consideration of cosmetic surgery.

H2: Self-surveillance, but not sexual objectification or body shame, should positively predict intrapersonal motives for cosmetic surgery, and this relationship should remain significant after controlling for impression management and global self-esteem.

H3: Sexual objectification and body shame, but not self-surveillance, should positively predict social motives for cosmetic surgery, and these relationships should remain significant after controlling for impression management and global self-esteem.

H4: Sexual objectification, self-surveillance, and body shame should positively predict consideration of cosmetic surgery in the future, and these relationships should remain significant after controlling for impression management and global self-esteem.

Method

Participants and Procedure

A total of 100 college women attending a southeastern British university received psychology course credit for their participation. The mean age was 23.37 years ($SD = 6.35$), ranging from 18 to 49, with 86% of the women below the age of 30. The ethnic composition of the sample was 79% White, 9% Black African, 7% Asian, and 5% Other/Mixed Race. Participants were predominantly British (78%) and there was little variability in the reported sexual orientation of participants: 91% heterosexual, 6% bisexual, 1% homosexual, and 4% unspecified. A female experimenter announced the study at the end of a psychology lecture. After reading a brief description of the research, consenting participants completed the self-report measures described below in counterbalanced order, and provided demographic information (i.e., age, ethnicity, sexual orientation) before returning the packet of measures in a sealable envelope. The experimenter provided a full debriefing immediately following completion of the study.

Measures

Impression management. The Impression Management (IM) subscale of the Balanced Inventory of Desirable Responding (Paulhus, 1991) was used to measure the tendency to control how one appears to others, with a focus on presenting oneself in a socially desirable way. Participants rated 20 items on a scale from 1 (*not true*) to 7 (*very true*), such as “I have done things that I don’t tell other people about.” In the present study, the items were summed to create scale scores ($\alpha = .75$), using a continuous scoring

method (e.g., Pauls & Crost, 2004). Scores ranged from 20 to 140, with higher scores indicating a greater tendency to engage in impression management. Previous research on the IM subscale has shown stable 5-week test-retest reliability and internal reliability, with alphas ranging from .75 to .86 (Paulhus, 1991), and good convergent and discriminant validity (Lanyon & Carle, 2007; Paulhus, 1991).

Global self-esteem. The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) was used to measure trait-based global self-esteem. Participants rated items, such as “On the whole, I am satisfied with myself,” on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*), with higher scores indicating higher global self-esteem. In the present study, items were averaged to create scale scores (10 items, $\alpha = .85$). Previous research has shown that the RSE has high internal reliability, with alphas ranging from .72 to .88, and good convergent and discriminant validity (Blascovich & Tomaka, 1993; Wylie, 1989).

Interpersonal sexual objectification. The Interpersonal Sexual Objectification Scale (ISOS; Kozee, Tylka, Augustus-Horvath, & Denchik, 2005) was used to measure the extent to which women have experienced interpersonal forms of sexual objectification (i.e., body evaluation and unwanted explicit sexual advances) throughout their lifetime. Participants rated 15 items on a scale from 1 (*never*) to 5 (*almost always*), such as “How often have you noticed someone staring at your breasts when you are talking to them?” In the present study, items were averaged to create scale scores ($\alpha = .94$). Scores ranged from 1 to 5, with higher scores indicating more frequent experiences of interpersonal sexual objectification. Previous research on the ISOS has shown stable 3-week test-retest reliability and internal reliability, with alphas ranging from .91 to .95, and good convergent, discriminant, and incremental validity (Kozee et al., 2007).

Self-surveillance. The Surveillance subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996) was used to measure the degree to which individuals habitually monitor their bodies from an external observational standpoint, thus focusing more on how their bodies look than on how their bodies feel. Participants were asked to rate 8 items from 1 (*strongly disagree*) to 7 (*strongly agree*), such as “During the day, I think about how I look many times.” In the present study, items were averaged to create scale scores. Scores ranged from 1 to 7, with higher scores indicating more frequent monitoring and thinking about how one looks ($\alpha = .83$). Previous research on this subscale has demonstrated stable 2-week test-retest reliability and moderate to high internal reliability, with alphas ranging from .76 to .89), and good convergent and discriminant validity (McKinley & Hyde, 1996).

Body shame. The Body Shame subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996) was used to measure the degree to which individuals feel shame about their bodies when they perceive themselves as falling short of meeting cultural appearance standards. Participants rated 8 items from 1 (*strongly disagree*) to 7 (*strongly agree*), such as “When I’m not the size I think I should be, I feel ashamed.” In the present study, items were averaged to create scale scores ($\alpha = .89$). Scores ranged from 1 to 7, with higher scores indicating more frequent monitoring and thinking about how one looks. Previous research on this subscale has demonstrated stable 2-week test-retest reliability and moderate to high internal reliability, with alphas ranging from .70 to .75, and good convergent and discriminant validity (McKinley & Hyde, 1996).

Cosmetic surgery attitudes. The Acceptance of Cosmetic Surgery Scale (ACSS; Henderson-King & Henderson-King, 2005) was used to measure the degree to which people hold favourable attitudes toward using cosmetic surgical procedures as a means for changing one’s physical appearance. It consists of three subscales: The Intrapersonal subscale includes five items that represent the

endorsement of self-oriented reasons for deciding to have cosmetic surgery, such as “Cosmetic surgery can be a big benefit to people’s self-image.” The Social subscale includes five items that represent the endorsement of social motivations for deciding to have cosmetic surgery, such as “I would seriously consider having cosmetic surgery if my partner thought it was a good idea.” The Consider subscale includes five items that represent the likelihood of deciding to have cosmetic surgery, such as “In the future, I could end up having some kind of cosmetic surgery.” Participants rated each of the items from 1 (*strongly disagree*) to 7 (*strongly agree*). In the present study, items were averaged to create scale scores ($\alpha = .89$, $\alpha = .87$, $\alpha = .92$, respectively). Scores ranged from 1 to 7, with higher scores indicating more positive attitudes toward cosmetic surgery.

Previous research has shown that each subscale of the ACSS has stable 3-week test-retest reliability, convergent and discriminant validity, and high internal consistency, with alphas ranging from .84 to .92 (Henderson-King & Henderson-King, 2005). Furthermore, several studies have examined the subscales as distinct constructs when examining attitudes toward cosmetic surgery (e.g., Henderson-King & Henderson-King, 2005; Swami et al., 2008).

Results

We handled the few missing data points by substituting participants’ mean scale scores for the missing value, and then examined the normality of the data. The skewness (-.53 to +.50) and kurtosis (-.65 to +.56) values for the scale scores indicated normally distributed observations that fell within the acceptable range for testing hierarchical regression models (skewness < 3 and kurtosis < 10; Kline, 2005). In addition, we computed Shapiro-Wilk tests (W) to confirm that the scale scores represented normal distributions in this small sample (Shapiro, Wilk, & Chen, 1968). A significant W -test statistic indicates a non-normal distribution.

The *W*-statistics for the scale scores were not significant, indicating that the sample of observations came from normally distributed populations of observations (*ps* = .12 to .50).

Means, standard deviations, and correlations are presented in Table 1. In support of our first hypothesis, cosmetic surgery attitudes were positively correlated with each of the predictor variables, such that more frequent experiences of sexual objectification, greater self-surveillance, and higher body shame were each associated with greater acceptance of intrapersonal and social motives for cosmetic surgery and greater consideration of cosmetic surgery. Next, hierarchical regression analyses tested the role of the objectification theory variables in women's attitudes toward cosmetic surgery. This approach is appropriate considering the sizeable amount of shared variance observed among objectification variables in prior research (Calogero, in press; Moradi & Huang, 2008). As order of entry in hierarchical regression is critical, the predictor variables were entered based on their temporal position derived from objectification theory (Fredrickson & Roberts, 1997), such that shared variance would not contribute to any increment in R^2 when subsequent predictors were entered into the model. Specifically, impression management and global self-esteem were entered first to control for these effects at each step. Then, sexual objectification was entered in the second step, self-surveillance in the third step, and body shame in the final step.

We first examined the Tolerance and VIF values to determine the degree of multicollinearity among the predictors. Both of these values were very close to 1 for all predictors (Tolerance = .90 to .99; VIF = 1.01 to 1.11), indicating that multicollinearity was not a problem in these analyses. The results of the hierarchical regression analyses revealed support for the remaining three hypotheses (see Table 2). That is, after controlling for impression management, global self-esteem, and shared variance among the predictors,

unique associations were found between the set of objectification theory variables and each of the cosmetic surgery attitudes. As expected (H2), only self-surveillance significantly predicted intrapersonal motives, accounting for the most unique variance of the objectification theory variables: sexual objectification ($sr^2 = .03$), self-surveillance ($sr^2 = .11$), and body shame ($sr^2 = .03$). Also, as expected (H3), only sexual objectification and body shame significantly predicted social motives, accounting for more unique variance than self-surveillance: sexual objectification ($sr^2 = .06$), self-surveillance ($sr^2 = .01$), and body shame ($sr^2 = .05$). Finally, as predicted (H4), all of the objectification theory variables significantly and uniquely predicted the extent to which women would consider having cosmetic surgery in the future: sexual objectification ($sr^2 = .06$), self-surveillance ($sr^2 = .05$), and body shame ($sr^2 = .08$).

Discussion

Experiences of sexual and self-objectification have been associated with various health risks and self-harming behaviors among women (Kozee et al., 2007; Moradi & Huang, 2008; Wolf, 1991). Drawing from and extending objectification theory (Fredrickson & Roberts, 1997), we investigated the possibility that women's experiences of sexual objectification, self-surveillance, and body shame would predict more positive attitudes toward cosmetic surgery as a way of manipulating how their bodies look. The results of this cross-sectional, correlational study provide preliminary evidence that this set of objectification theory variables predicts the degree to which women accept cosmetic surgery as a means of body modification and appearance control.

The significant associations observed between specific objectification variables and specific motives for cosmetic surgery also shed light on the different psychological processes that may inform women's attitudes toward cosmetic surgery. For example, prior research has shown that intrapersonal reasons for cosmetic surgery are related to body shame, but not self-surveillance (Henderson-

King & Henderson-King, 2005). However, these findings were based on zero-order correlations that did not control for competing influences, whereas the present study found that self-surveillance was a unique predictor of intrapersonal reasons even after accounting for more general concerns related to self-presentation and self-esteem, sexual objectification experiences, and body shame. The items that comprise the intrapersonal reasons subscale focus on the use of cosmetic procedures to enhance one's self-image and to feel better about oneself overall. Women who engage in more habitual body monitoring are more self-focused, and therefore would be more likely to endorse strategies that could potentially improve how they view their appearance.

The present study also demonstrated that more frequent experiences of sexual objectification and body shame were unique predictors of social reasons for cosmetic surgery, whereas self-surveillance was not. The items that comprise the social reasons subscale focus on the use of cosmetic procedures to enhance one's physical attractiveness in order to reap social rewards. Given that sexual objectification and body shame are more closely tied to the experience of being socially evaluated by others based on one's appearance, women who have experienced more sexual objectification and body shame would be more likely to endorse strategies that could potentially improve how attractive they appears to others. Not surprisingly, each of the objectification theory variables positively predicted the degree to which women would consider having cosmetic surgery in the future.

Because causal relationships cannot be established from correlational data, confirmation of these associations with experimental tests would strengthen confidence in the application of objectification theory to understanding women's cosmetic surgery attitudes. In addition, we only tested women's attitudes toward cosmetic surgery and not actual cosmetic surgery behavior. The degree to which objectification processes and positive attitudes toward cosmetic surgery predict whether women actually undergo

cosmetic surgery requires further investigation. Moreover, whether or not cosmetic surgery changes how women experience sexual and self-objectification has not been studied. For example, a woman who undergoes a breast augmentation procedure would have larger breasts and should expect to be more (not less) sexually objectified, but would this woman experience more or less self-surveillance and body shame post-surgery? Striving to bring the body more in line with current feminine beauty ideals (e.g., larger breasts) would not necessarily alleviate body concerns. Indeed, drawing more attention to the body after cosmetic surgery may intensify views of the self as a collection of sexual body parts and lead to a greater likelihood of perceiving other physical flaws (cf. Calogero, Herbozo, & Thompson, 2009; Johnston-Robledo, Wares, Fricker, & Pasek, 2007; Roberts, 2004), potentially perpetuating a vicious cycle of self-objectification and body modification.

We did not assess body mass index or previous experiences with cosmetic surgery, both of which may account for some portion of women's attitudes toward cosmetic surgery (Swami et al., 2008). In addition, our sample was comprised of predominantly White university students, which limits the generalizability of these findings to women across the age and ethnicity spectrum. It is noteworthy that although appearance concerns and self-objectification have been found to decrease with age (Halliwell & Dittmar, 2003; McKinley, 2006; Tiggemann & Lynch, 2001), cosmetic surgery appears to be on the rise among older adults, primarily women (BAAPS, 2009). Thus, the relationship between objectification processes and cosmetic surgery attitudes across the life span, and among non-university samples, requires further research. For example, as illustrated in Nirmal Puwar's (2004) interviews with female members of the British parliament, women's continued legitimacy within the legislature requires them to suffer constant sexist remarks and to chronically monitor their appearance to convey the right amount of femininity. It is possible that women who hold

higher status positions, especially in traditionally male-dominated settings, might feel more pressure to undergo cosmetic surgery to enhance or maintain a feminized appearance to offset the potential backlash that comes from being perceived as violating traditional gender roles (Glick & Fiske, 1999; Rudman & Glick, 2001). These observations highlight that women from particular social and occupational groups may be more vulnerable to sexual and self-objectification and hold more positive attitudes toward cosmetic surgery. These understudied groups of women, such as women in effectual leadership positions, warrant further investigation with respect to their cosmetic surgery attitudes and behavior.

Overall, these findings suggest that objectification theory may have unique utility for predicting the degree to which women endorse, and potentially undergo, cosmetic surgery. Furthermore, if we agree that the objectification of women's bodies represents a negative environmental context that encourages women to undergo cosmetic surgery, then positive environmental conditions that communicate the unconditional acceptance of women's bodies may discourage women from endorsing cosmetic surgery. For example, drawing from Avalos and Tylka's (2006) model of intuitive eating, environmental contexts that foster body acceptance (as opposed to body objectification) promote more intuitive eating among women because these contexts direct women's attention more toward how their bodies feel and function instead of how their bodies look. When women focus more on how their bodies function and feel internally, rather than their external appearance, they are more likely to experience body appreciation and less likely to experience body shame (Tylka, 2006). Future research is needed to investigate whether experiences of unconditional body acceptance predict less endorsement of cosmetic surgery, thereby affording some protection against an objectifying cultural milieu that encourages women to view their bodies as a collection of malleable body parts subject to surgical manipulation to alter their "looks."

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Table 1.

Summary of Means, Standard Deviations, and Zero-Order Correlations for Scores on the Objectification Theory Variables, Covariates, and Cosmetic Surgery Attitudes

	Intrapersonal Motives	Social Motives	Consider in Future	M (SD)	Scale Range
Intrapersonal	–	–	–	3.74 (1.49)	1-5
Social	.68***	–	–	2.71 (1.48)	1-5
Consider	.72***	.75***	–	3.35 (1.15)	1-5
Sexual Objectification	.21*	.27**	.29**	2.50 (0.85)	1-5
Self-Surveillance	.39***	.18*	.26**	4.38 (0.66)	1-7
Body Shame	.14	.22*	.26**	3.51 (0.74)	1-7
Impression Management	–.19*	–.12	–.07	72.04 (13.28)	20-140

Global Self- Esteem	-.12	-.21*	-.10	3.75 (0.43)	1-6
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Note. N=100. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2.

Summary of Hierarchical Regression Results

Predictor	Intrapersonal			Social			Consider in Future		
	β	t-test	ΔR^2	β	t-test	ΔR^2	β	t-test	ΔR^2
Step 1									
IM	.17	1.80		.13	1.30		.07	0.72	
SE	-.04	-0.43	.05	-.17	-1.75	.06	-.04	-0.37	.02
Step 2									
SEX OBJ	.18	1.91	.05	.24	2.56**	.07	.25	2.67**	.08
Step 3									
SURV	.35	3.62***	.10	.11	1.14	.01	.24	2.47*	.04
Step 4									
SHAME	.17	1.91	.03	.23	2.50**	.05	.28	3.08**	.08

Model			
$F(df), R^2$	$F(5,94) = 5.72^{***}$ $R^2 = .23$	$F(5,94) = 4.34^{**}$ $R^2 = .19$	$F(5,94) = 5.20^{***}$ $R^2 = .22$

Note. N=100. IM=impression management; SE: global self-esteem; SEX OBJ = interpersonal sexual objectification; SURV = self-surveillance; SHAME = body shame.

* $p < .05$. ** $p < .01$. *** $p < .001$.