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The unique properties of self-objectification and social and individual influences on its expression

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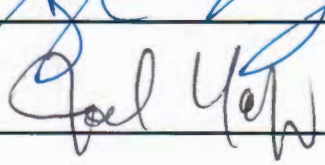

THE UNIQUE PROPERTIES OF SELF-OBJECTIFICATION AND SOCIAL AND INDIVIDUAL INFLUENCES ON ITS EXPRESSION

by

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B.A., Psychology, Wesleyan University, 2002
M.S., Psychology, University of New Mexico, 2007

DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

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ABSTRACT

Objectification Theory suggests that women are frequently viewed largely as sexualized objects, whether it occurs in interpersonal interactions or in media images. One major consequence of routine exposure to this pervasive objectification of women's bodies by others is that girls and women internalize this outsider's view of themselves and engage in self-objectification. One purpose of the two following studies was to differentiate self-objectification from other, similar constructs which included public self-consciousness, self-monitoring, and social anxiety. A second purpose was to elucidate factors that predict heightened self-objectification, including teasing, the influence of family and peers, and the influence of the media. Two hundred and two undergraduate women completed questionnaire data as part of Study One, and 204 undergraduate women completed questionnaire data as part of Study Two. Results of Study One revealed that measures of self-objectification predicted body shame better than seemingly similar variables measuring public self-consciousness, social phobia, and self-monitoring in the context of multiple linear regressions. Path analyses conducted as part of Study

Two revealed that media influence directly predicted self-objectification, which in turn predicted body image disturbance and disordered eating. Teasing and the influence of family and friends predicted self-objectification; however, self-objectification did not mediate the relationship between these variables and body image disturbance and disordered eating. Instead, teasing and the influence of family and friends directly predicted body image disturbance and disordered eating independently of their relationships with self-objectification. Results revealed that self-objectification is a distinct construct related to body image disturbance and eating pathology which is predicted by family, peer, and media influence, as well as teasing.

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Introduction

Objectification Theory suggests that women are frequently viewed largely as sexualized objects, whether it occurs in interpersonal interactions or in media images. Girls and women are continually bombarded with the message that their physical appearance is extremely important in how they are judged by others. One major consequence of routine exposure to this pervasive objectification of women's bodies by others is that girls and women internalize this outsider's view of themselves and engage in self-objectification (Fredrickson & Roberts, 1997). Self-objectification is the process of viewing oneself from a third person's perspective and monitoring one's appearance. Interestingly, it does not have an inherent affective component. According to Objectification Theory, the process of self-objectification is maintained because it is important for woman to remain vigilant in monitoring their physical attractiveness.

Social Context of Self-Objectification

The objectification of women occurs in the context of a society that places major importance upon a woman's physical attractiveness in determining her success in various life arenas. Evidence suggests that physical attractiveness has a greater impact on a woman's popularity and her dating and marriage opportunities than it does on a man's (Margolin & White, 1987). With regard to weight specifically, overweight women report that they experience a more unfriendly work environment and more job discrimination than do overweight men (Snow & Harris, 1985). Consumers are bombarded by media images of women's bodies without an emphasis on, or even the presence of, a face or

head, while images of men often focus on the face (Archer, Iritani, Kimes, & Barrios, 1983). As such, women in these images are de-personified and evaluated according to the attractiveness of their bodies. Living in this environment, girls and women become remarkably aware of the importance of their appearance in determining how they will be perceived by others and judged. In order to monitor their adherence to the cultural standard of female beauty, women engage in scrutiny of their physical appearances from a third-person perspective: self-objectification.

One purpose of the two following studies was to differentiate self-objectification from other, similar constructs. A second purpose was to elucidate factors that predict heightened self-objectification. To do this, it is necessary to first discuss how self-objectification has been operationalized in the literature. Self-objectification generally has been operationalized by two measures: the Self-Objectification Questionnaire (SOQ), which is sometimes referred to as the Trait Self-Objectification Questionnaire (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998), and the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996). It is important to note that the SOQ is not face-valid, in that it is not obvious how this instrument measures the construct of treating the self as an object. Nonetheless, the SOQ is widely used in the field. In a review of the self-objectification literature, Miner-Rubio (2008) found that studies using the SOQ did not have entirely consistent results, and the OBCS (described below) was superior in terms of reliability across studies. The SOQ presents individuals with 10 body attributes. Five of the attributes are associated with physical appearance (e.g., weight, measurements, sex appeal), and five are associated with physical functionality (e.g., strength, energy level, health). Individuals are instructed to rank order these traits on a

scale of 0 (least impact) to 9 (greatest impact) indicating the degree to which each body attribute impacts the individuals' self-concept. The OBCS is comprised of three subscales: Surveillance, Body Shame, and Control Beliefs. The Surveillance scale measures the degree to which individuals view their physical body from a third-person perspective. The Body Shame scale measures the degree to which individuals ascribe to cultural body standards and feel ashamed if they do not meet these standards. The Control Beliefs scale measures the degree to which individuals believe they can control their weight and shape.

The subscales of the OBCS are implemented inconsistently in the self-objectification literature. On some occasions the Surveillance subscale alone is used as a measure of self-objectification (Aubrey, 2006; Greenleaf, 2005; Moradi, Dirks, & Matteson, 2005), whereas in other instances the Surveillance and Body Shame scales are used together (Basow, Foran, & Bookwala, 2007; Muehlenkamp & Saris-Baglama, 2002). Occasionally the Surveillance and Body Shame scales are administered as measures of corollaries of self-objectification, with self-objectification being measured by the SOQ (Calogero & Jost, 2011; Greenleaf & McGreer, 2006; Miner-Rubio, Twenge, & Fredrickson, 2002; Slater & Tiggemann, 2002; Tiggemann & Slater, 2001). The authors of these studies argue that Surveillance and Body Shame are highly similar to self-objectification, but are not identical constructs. In fact, the construct of body shame does not appear to be a central component of the process of self-objectification as proposed by Objectification Theory. Body shame includes a clear affective component (shame), and is more a *result* of the process of self-objectification, rather than a central process. The Control subscale is not commonly used in the self-objectification literature.

To date,, a comparison of the SOQ and OBCS has not been undertaken. The following study results should be interpreted in light of this somewhat inconsistent measurement of self-objectification.

Consequences of Self-Objectification Outside of the Laboratory

Unfortunately, self-objectification is associated with many negative outcomes, including depressive symptoms, body shame, appearance anxiety, restrictive eating, and disordered eating (Calogero, Davis, & Thompson, 2005; Greenleaf, 2005; Muehlenkamp, et al., 2002; Noll & Fredrickson, 1998; Slater et al., 2002; Syzmanski & Henning, 2007; Tiggemann & Kuring, 2004). Specifically, high levels of self-objectification predict amplified appearance anxiety and dietary restraint among non-clinical samples of undergraduate women (Greenleaf, 2005; Noll & Fredrickson, 1998). In other non-clinical samples of adolescent and undergraduate women, research has shown consistently that heightened self-objectification significantly predicts disordered eating thoughts and behaviors, and that this relationship is often partially mediated by body shame and depressive symptoms (Greenleaf, 2005; Muehlenkamp & Saris-Baglama, 2002; Slater & Tiggemann, 2002). This same relationship exists among clinical samples of women with eating disorders, albeit their levels of both self-objectification and eating disordered thoughts and behaviors are much higher than their non-clinical counterparts' levels (Calogero et al., 2005). Self-objectification has been shown to directly predict depressive symptoms in several studies, as high self-objectification contributed a unique and significant amount of variance to high levels of depressive symptoms among undergraduate samples of women (Muehlenkamp & Saris-Baglama, 2002; Szymanski & Henning, 2007; Tiggemann & Kuring, 2004).

Self-objectification also has been implicated as a mediator in the relationship between internalization of the thin ideal and body dissatisfaction (Myers & Crowther, 2007). Results from a sample of undergraduate women led Myers and Crowther (2007) to suggest that once young women have accepted the thin ideal of beauty as something to which they aspire, self-objectification may result as a means of monitoring and assessing their adherence to this standard. The discrepancy that might result between their assessment of themselves and existing cultural ideals may ultimately lead to increased body dissatisfaction. It is important to note that given the inconsistency of the measurement of self-objectification across these studies, and the lack of face validity of the SOQ, one cannot draw definitive conclusions about the relationship between self-objectification and these other variables.

Consequences of Self-Objectification: Laboratory Studies

Researchers have attempted to influence individuals' levels of self-objectification via experimental manipulation.In several studies, half of the participants were asked to wear a bulky sweater to complete a task while the other half wore bathing suits (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Hebl, King, & Lin, 2004). The experimenters argued that participants in the swimsuit condition were put into a position of heightened self-objectification because their attention was drawn to andbecame focused on their physical appearance due to the revealing and form-fitting bathing suit. In contrast, participants in the sweater condition tended to focus much less attention on their physical appearance and self-objectified to a much lesser extent(Fredrickson et al., 1998; Hebl et al., 2004). Results revealed that women in the bathing suit condition performed significantly worse on a math test than did women in the sweater condition. In addition to

diminished math test performance, experimental manipulations have found that female participants in a swimsuit-wearing condition perform significantly worse on a Stroop color-naming task than do participants asked to wear a v-neck sweater when completing the task (Quinn, Kallen, Twenge & Fredrickson, 2006).

Researchers have attempted to explain this relationship between hypothesized heightened self-objectification and decrement in task performance as being due to a decrease in attentional resources allotted to the task and a decrease in "flow" when one self-objectifies. Flow is the state of being highly focused and absorbed in a challenging or enjoyable activity without being self-conscious (Csikszentmihalyi, 1988). In the self-objectification literature, flow is the degree to which individuals feel engrossed and unselfconscious while completing various tasks. Indeed, reduced flow states have been reported more often among women high in appearance anxiety and self-objectification than among women low in these traits (Greenleaf & McGreer, 2006; Tiggemann & Slater, 2001). Thus, self-objectification appears to negatively impact experimental task performance amongst women. Importantly, studies have not yet examined the degree to which these decrements in performance in the laboratory translate into diminished performance in the real world. Nonetheless, preliminary evidence suggests that women who self-objectify to a high degree *outside* of the laboratory setting may not be performing to their abilities, which could result in negative academic and occupational outcomes.

It is important to note that while these laboratory manipulations purport to induce heightened levels of self-objectification in study participants, there is no concrete evidence to suggest that this has, in fact, occurred. These studies have not systematically

conducted pre-and post-test evaluations of self-objectification levels in their study participants, and they do not measure other variables that could account for differences in task performance, such as embarrassment, shame, self-consciousness, or social anxiety.

Thus, the repercussions of high levels of self-objectification (as currently operationalized)for adolescent girls and women are significant in that they are linked to diminished task performance, increased depressive symptoms,and increased eating disordered thoughts and behaviors. Furthermore, high self-objectification may be integral to explaining the link between body shame and body dissatisfaction. At the same time, the self-objectification literature has several limitations noted above in that it is inconsistently operationalized and many laboratory studies of self-objectification contain methodological flaws.

Why Study Self-Objectification?

Given the many negative outcomes associated with self-objectification, a more thorough exploration of this construct is warranted. As noted, self-objectification is somewhat poorly-defined and operationalized, despite there being two common measures of self-objectification. Subscales from one of these measures (the OBCS) are inconsistently implemented in the literature, and one of them (Body Shame) does not actually appear to be in line with what self-objectification purports to be, at least according to Objectification Theory. Additionally, self-objectification has not been thoroughly differentiated from other similar, and more extensively researched constructs. Therefore, it is not clear that self-objectification, as measured by the SOQ and the OBCS, contributes to the negative outcomes mentioned (e.g., poor body image, internalization of the thin ideal) above and beyond existing similar constructs such as public self-

consciousness, social anxiety, and self-monitoring (McKinley & Hyde, 1996). A brief review of the literature regarding the relationships between these similar constructs and body image disturbance and eating pathology is discussed below. It is essential to determine whether self-objectification is more predictive of body image disturbance and eating pathology than these other constructs. If self-objectification theory is indeed supported, it will be fruitful to examine variables that may lead to the development of maladaptive levels of self-objectification in the first place.

Public Self-Consciousness. One construct that warrants differentiation from self-objectification is public self-consciousness (Tangney, Burggraf, & Wagner, 1995). Public self-consciousness has been defined as "awareness of how one is seen by others as a social object", which appears very similar to a description of self-objectification (Klonsky, Dutton, & Liebel, 1990). In samples of ethnically diverse undergraduate women, results indicated that public self-consciousness was significantly related to body image disturbance and problematic eating behaviors (Akan & Grilo, 1995; Cooley & Toray, 1996; Klonsky et al., 1990; Striegel-Moore, Silberstein, & Rodin, 1993). Similar results were found in clinical populations of individuals with bulimia nervosa and anorexia nervosa (Forbush & Watson, 2006; Striegel-Moore et al., 1993). Interestingly, in a sample of adolescent girls, public self-consciousness was significantly related to increased propensity for comparing one's body to the bodies of others, which is a behavior that is also predicted by self-objectification theory (Schutz, Paxton, Wertheim, 2002). Given the similarities between descriptions of the constructs of self-objectification and public self-consciousness, as well as similar relationships between these variables and measures of body image and eating disturbance, it appears that further distinction

between these constructs is warranted. Does self-objectification measure a construct distinct from public self-consciousness?

Social Anxiety. Social anxiety is characterized by fear of social situations in which an individual might be negatively evaluated by others. Social anxiety is marked by cognitive, affective, and physiological responses, one of which is the cognitive construct called "fear of negative evaluation". Fear of negative evaluation refers to the concern that people feel about the possibility of being viewed negatively by others (McClintock & Evans, 2001). Fear of negative evaluation has been linked to several body image and eating disturbance variables, including body dissatisfaction, internalization of the thin ideal, drive for thinness, and bulimic behaviors (Gilbert & Meyer, 2003; 2005; Schutz & Paxton, 2007; Vander Wal & Thomas, 2004; Vander Wal, Gibbons, & Grazioso, 2008).

In fact, social phobia (social anxiety) is found at significantly higher rates in eating disordered individuals than controls (Godart, Flament, Perdereau, Jeammet, & Strober, 2002). In comorbid cases, social phobia tends to precede eating disorders (Kaye, Bulik, Thorton, & Barbarich, 2004). Since social anxiety includes a general fear of public performance, the implication is *not* that social anxiety and self-objectification are one and the same. Still, these constructs appear to be very similar, with concern regarding evaluation of appearance being a key point of overlap. We believe that further investigation of the discriminant validity of self-objectification variables in predicting measures of body image disturbance above and beyond social anxiety variables is warranted.

Self-Monitoring. Self-monitoring is a construct which posits that some individuals "monitor" and consequently regulate their social presentation across various

situations. Although there has been little study of the relationship between self-monitoring, body image disturbance, and eating pathology, Bachner-Melman and colleagues (2009) did report that anorexic symptomatology was positively correlated with "other directedness", a factor which comprises a component of self-monitoring. Specifically, Other-Directedness is the willingness to change one's behavior to please others. Additionally, high self-monitoring is associated with placing importance on one's physical appearance and appearance-directed behaviors such as dressing and grooming (Sullivan & Harnish, 1990). This construct appears to be very similar to behaviors described as inherent to self-objectification (e.g., monitoring one's physical appearance to achieve social standards of attractiveness).

Body Shame. As mentioned, each of these constructs: public self-consciousness, social anxiety, and self-monitoring are very similar to the construct of self-objectification, as proposed by Objectification Theory. Additionally, each of these aforementioned constructs has demonstrated a strong relationship with body image disturbance and eating pathology, as self-objectification is purported to do. In order to understand the distinction between self-objectification and these other constructs, it is important to compare the strength of the relationship between self-objectification and a common measure associated with body dissatisfaction/disordered eating with that of the strength of the relationship between these other constructs (public self-consciousness, social anxiety, and self-monitoring) and a common measure associated with body dissatisfaction/disordered eating.

Body shame is a construct that has long been associated with body image disturbance and problematic eating behaviors, as it measures the degree to which an

individual feels ashamed of her appearance. There is some evidence to suggest that general shame accounts for a significant portion of variance in eating disordered symptoms among undergraduate women (Sanftner, Barlow, Marschall, & Tangney, 1995; Tripp & Petrie, 2001; Troop, Sotrilli, Serpell, & Treasure, 2006). Additionally, shame has been linked to greater severity of bulimic symptoms among a sample of individuals with bulimia nervosa (Hayaki, Friedman, & Brownell, 2002). There is also some evidence that body shame itself is linked to disordered eating (Slater & Tiggemann, 2010; Tylka & Sabik, 2010). According to Objectification Theory, self-objectification should be highly correlated with body shame because the process of self-objectifying may lead an individual to realize that she is not meeting society's rigid beauty ideals and thus feel ashamed.

Given its robust relationship with body image disturbance and its proposed relationship to self-objectification, examining body shame's relationship with the aforementioned variables appears warranted. Results of this inquiry may allow us to further vouch for the validity of self-objectification as it is currently operationalized, or make suggestions as to how this construct should be further differentiated from other extant constructs. This research question was explored in the first of two studies (described below). Upon clarifying whether self-objectification is indeed a distinct construct, it stands to reason that it would then be productive to explore what factors contribute to its development. This research question was explored in a second study, also described below.

Proposed Study and Hypothesis

The purpose of the first study was to determine the discriminant validity of self-objectification in predicting body shame. Specifically, this study aimed to determine if this relationship was stronger or weaker than the relationship between body shame and constructs that are very similar to self-objectification, namely: public self-consciousness, social anxiety and self-monitoring. We hypothesized that self-objectification would indeed add power to the prediction of body shame above and beyond these other constructs.

Study 1 Method

Participants

Two hundred and twofemale undergraduates ages 18 and older were recruited from psychology classes at the University of New Mexico to participate in a study on "How You Think About Yourself". Participants enrolled using the department's online research credits web system and were awarded one research credit for their participation. Women who were not fluent in English, as determined by self-report, were asked to exclude themselves from the study. Additionally, women who enrolled in Study 2 (described below) were excluded from participating in Study 1.

The majority of the participants were either non-Hispanic, white (42.6%) or Hispanic (37.1%). One participant chose not to specify her race. The ethnic breakdown of the participants is provided in Table 1. Mean age for the sample was 20.39 (*SD*=4.03), with a range from 18 to 46. Body mass index (BMI), a measure of body fat based upon height and weight, was calculated using the following formula: (weight in lbs x 703)/(height in inches)$^{2.}$ Mean BMI for the sample was 23.56 (*SD*=4.22), with a range from 16.64 to 43.64. Five percent of the study sample fell in the underweight range

(BMI<18.5), 69.3% fell in the normal weight range (BMI between 18.5-24.9), and 25.7% fell in the overweight range (BMI >25.0).

Measures

Demographics Questionnaire (See Appendix A). The Demographics Questionnaire was used to gather information regarding participants' age, ethnicity, height and weight. Height was self-reported, and weight was measured during the study session.

Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996; See Appendix B). This measure of self-objectification is comprised of three subscales: Surveillance, Body Shame, and Control Beliefs. The Surveillance scale measures the degree to which individuals view their physical body from a third-person perspective. The Body Shame scale measures the degree to which individuals ascribe to cultural body standards and feel ashamed if they do not meet these standards. The Control Beliefs scale measures the degree to which individuals believe they can control their weight and shape. Each subscale has 8 items which are rated on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). Fourteen of the items are reverse-scored. Higher scores correspond with higher levels of surveillance, body shame, and control beliefs. The OBCS has demonstrated high internal reliability and good construct validity (McKinley & Hyde, 1996). Cronbach's alpha for the Surveillance subscale in the current sample was .82; alpha for the Body Shame and Control Beliefs subscales were .80 and .68, respectively. Cronbach's alpha for the total questionnaire was .77.

Self-Objectification Questionnaire (SOQ; Fredrickson, Noll, Roberts, Quinn, & Twenge, 1998; See Appendix C). The SOQ asks participants to rank order 10 body

attributes, rating how important they believe each attribute to be (0= least important, 9= most important). Five of the attributes are appearance-based (e.g., sex appeal, physical attractiveness) and five are competency-based (e.g., physical coordination, physical fitness level). The total score for this scale ranges from -25 to +25 and is computed by summing the total of the ranks for the five appearance-based attributes and subtracting the sum total of the ranks for the five competency-based attributes. Higher scores indicate a greater degree of self-objectification. This scale has demonstrated adequate construct validity (Noll & Fredrickson, 1998).

Self-Consciousness Scale (SCS; Fenigstein, Scheier, & Buss, 1975; See Appendix D). The SCS contains 23 items wherein individuals rate statements on a scale from 0 (extremely uncharacteristic) to 4 (extremely characteristic). The SCS yields 3 subscales: private self-consciousness, public self-consciousness, and social anxiety. Private self-consciousness measures how much a person is aware of and attends to private aspects of the self (e.g., feelings, thoughts, fantasies), whereas public self-consciousness measures how much a person is aware of and attends to public aspects of the self (e.g., impressions on others, appearances). Social anxiety measures the degree to which an individual is anxious in social situations. Since the SCS was used in the current study to measure public self-consciousness, only the results of that scale are reported. The SCS has demonstrated good test-retest reliability (Fenigstein et al., 1975). Cronbach's alpha for the public self-consciousness subscale of the SCS is .74.

Self-Monitoring Scale (SMS, Lennox & Wolfe, 1984; See Appendix E). The SMS is a self-report measure of the degree to which an individual controls his/her expressive behavior and self-presentation. The scale includes 33 items which are answered on a

scale from 0 (certainly, always false) to 5 (certainly, always true). Higher scores indicate higher levels of self-monitoring.This version of the SMS yields two subscales: Self-Monitoring and Concern for Appropriateness. The SMS demonstrates a stable factor structure and acceptable internal consistency (Lennox & Wolfe, 1984). Only the Self-Monitoring subscale was used in this study. Cronbach's alpha was .79.

Social Phobia Inventory (SPIN; Connor, Davidson, Churchill, Sherwood, Foa & Weisler, 2000; See Appendix F). The SPIN is a self-report measure of social fear, avoidance, and physiological discomfort. Participants are asked to endorse 17 items on a scale of 0 (not at all) to 4 (extremely). Higher scores indicate higher social anxiety. This scale shows good test-retest reliability, internal consistency, and both convergent and divergent validity (Connor et al., 2000). Cronbach's alpha for this scale was .90.

Procedure

Upon arrival for the study, participants signed an informed consent document (See Appendix I) and were given instructions for filling out the questionnaires described above. Participants generally completed this study in a group setting, with groups ranging from 2 to 4 women. Aside from the Demographics Questionnaire, which was always presented first, questionnaires were presented in a counterbalanced order across participants. No order effect was found. Following completion of the questionnaires, which took 45 minutes on average, participants were weighed by the experimenter in a separate room. Participants were then privately debriefed as to the purpose of the study and given a list of relevant mental health referrals.

Plan for Data Analysis

In order to determine whether standard measures of self-objectification predicted body shame to a greater extent than other similar constructs, multiple regression was conducted. Body shame, as operationalized by the OBCS-Body Shame subscale, was entered as the dependent variable. The following variables were entered as independent variables in Block One of this regression: Public Self-Consciousness scale of the Self-Consciousness Scale, Self-Monitoring Scale, and Social Phobia Index. The following variables were entered as independent variables in Block Two of this regression: SOQ and OBC-Surveillance.

Study 1 Results

Characteristics of the Sample

None of the individuals who signed up for this study were excluded. Mean scores for all variables of interest can be found in Table 2. Body Mass Index (BMI) for the sample was in the normal range (*M*= 23.57, *SD*= 4.22, Range= 16.64-43.64). The mean BMI for each ethnic group was also in the normal range, with the exception of African Americans, whose BMI was in the slightly overweight range (*M*= 25.15). Still, there were no significant ethnic differences for BMI in this sample.

Self objectification variables. Scores on the OBC-Surveillance subscale range from 1-7, with higher scores indicating more self-objectification. The mean OBC-Surveillance score was 4.40 (*SD*= .70). Mean score on the SOQ was -2.64 (*SD*= 13.34). Scores on this scale range from -25 to 25, with higher scores being indicative of higher levels of self-objectification. This mean score suggests that participants were more likely to value the physical functionality of their bodies over its physical attractiveness.

Body Shame. Scores on the OBC-Body Shame subscale range from 1-7, with higher scores indicating more body shame. The mean OBC-Body Shame score for the total sample was 3.10 (*SD*= 1.14).

Public self-consciousness, self-monitoring, and social anxiety. Mean score on the public self-consciousness variable was 16.01 (*SD*= 4.61) on a scale of 0 to 28, with higher scores indicating greater public self-consciousness. Mean score on the SPIN was 19.74 (*SD*= 11.92) on a scale of 0 to 68. This falls above the cut-off of 17, which indicates the presence of social anxiety. Mean score on the Self-Monitoring Scale was 44.12 (*SD*= 6.81) on a scale from 0 to 65, with higher scores indicating greater degrees of self-monitoring. The results of an omnibus Analysis of Variance (ANOVA) conducted on each of the dependent variables of interest revealed no significant differences among the ethnic groups.

Hypothesis Testing

In order to test the hypothesis that measures of self-objectification would better predict body shame than seemingly similar variables measuring public self-consciousness, social phobia, and self-monitoring, multiple linear regression was conducted. The non-self-objectification variables, SCS-Public Self-Consciousness, SPIN, and Self-Monitoring, were all entered as independent variables in Block One. The self-objectification variables, OBC-Surveillance and SOQ, were entered as independent variables in Block Two.

In general, these variables of interest were highly correlated with one another, with the exception of self-monitoring, which was only significantly correlated with social phobia ($p<.05$). In fact, our criterion variable, OBC-Body Shame, was significantly

related to OBC Surveillance, SOQ Total score, public self-consciousness, and social phobia (p<.01). Please refer to Table 3 for Pearson correlations of these variables of interest.

Results of this regression indicate that Block One in this regression, which included SCS-Public Self-Consciousness, Self-Monitoring, and SPIN, significantly predicted body shame, R^2= .332, p<.001. Interestingly, this significant relationship appeared to be driven primarily by public self-consciousness, β = .302, p<.001, and social anxiety, β = .262, p<.001, in which higher levels of public self-consciousness and social anxiety predicted higher levels of body shame. Self-monitoring was not significantly related to body shame, β = -.092, p = .123. See Table 4 for regression results.

The OBC-Surveillance and SOQ variables were entered in Block Two of this regression to determine the extent to which these variables significantly add to the prediction of body shame. Results indicate that this block of variables significantly increased $R^2$to .376, which was a significant increase of .044, p<.01. Thus, this block of variables did add significantly to the prediction of body shame. The OBC-Surveillance scale appeared to drive this significant relationship, as higher levels of body surveillance predicted higher levels of body shame, β = .175, p<.05. The SOQ did not significantly predict body shame, β = .119, p=.077.

Overall, these results suggest that although public self-consciousness and social anxiety predict body shame, one measure of self-objectification (OBC-Surveillance) added significantly to the prediction of body shame. At the same time, the Self Objectification Questionnaire (SOQ) was not a good predictor of body shame.

Study 1 Discussion

The purpose of this study was to determine the extent to which measures of self-objectification predicted body shame compared to other, similar constructs, such as public self-consciousness, self-monitoring, and social anxiety. This line of inquiry was pursued because Objectification Theory (Fredrickson & Roberts, 1997) has proposed the existence of a self-objectification construct which purportedly leads to body image disturbance and disordered eating for many girls and women. According to the theory, self-objectification entails viewing oneself as an object, rather than as an individual with a complex identity. The self-objectification literature is relatively new. As such, this self-objectification construct has yet to be thoroughly distinguished from other constructs whose descriptions appear to be quite similar to that of self-objectification, and which already have a documented relationship to body image disturbance and internalization of the thin ideal. It was therefore essential to determine whether self-objectification was indeed a unique construct with an important relationship to body image disturbance.

It is important to note from the start that this sample's scores on all questionnaires were similar to those found in other samples of college age women (Basow et al., 2007; Cooley & Toray, 2001; Greenleaf et al., 2006; Muehlenkamp et al., 2002; Nezlek, 2002; Stewart & Mandrusiak, 2007; Thompson, et al., 2004). With that said, an examination of the seemingly similar constructs revealed that only public self-consciousness and social anxiety significantly predicted body shame. More importantly, self-objectification, as measured by the Objectified Body Consciousness Surveillance subscale, added power to the prediction of body shame, while self-objectification as operationalized by the SOQ did not.

These results suggest that self-objectification, as operationalized by the OBC Surveillance scale, is a distinct construct that makes an important contribution to the body image and eating disorders field and literature. According to Objectification Theory, women are taught to view themselves as objects whose primary value is physical attractiveness (Fredrickson & Roberts, 1997). The results of the current study suggest that when female college students perceive themselves as objects and engage in physical self-surveillance, they are at a higher risk to also feel ashamed of their physical appearance, which in turn is a risk factor for disordered eating. Possibly this relationship between self-surveillance and body shame exists because once women begin to monitor their appearances and compare them to cultural ideals of beauty, they feel inadequate and are ashamed of their failure to achieve these difficult-to-attain ideals.

Interestingly, self-objectification as measured by the Self-Objectification Questionnaire (SOQ) did *not* add significantly to the prediction of OBC-Body Shame beyond that predicted by the OBC Surveillance subscale. These results mirror those in several other studies, in which the SOQ did not predict many disordered eating or body image variables (Moradi & Huang, 2008; Tiggemann & Kuring, 2004; Tiggemann & Slater, 2001). The SOQ asks individuals to rank order different physical attributes, which can be categorized as either functional (e.g., health) or appearance-based (e.g., sex appeal). Individuals who generally rank appearance-based attributes as more important to them than functional physical attributes are said to have higher levels of self-objectification. While the SOQ does appear to tap into the notion that individuals value their appearance above the functional aspects of their body, it does not measure the degree to which individuals engage in objectifying behaviors, such as the monitoring of

physical appearance, as the OBC-Surveillance scale does. It is possible that the behavior of physical self-surveillance is what places an individual at risk for body shame, rather than simply viewing oneself as an object without engaging in associated behaviors. These results add tentative evidence that the SOQ may not be particularly useful when examining problems associated with body image and eating pathology.

Future Directions

The current study has begun to establish that a measure of self-objectification adds significant power to the prediction of body shame and appears to be measuring a construct distinct from similar constructs such as social anxiety, self-monitoring, and public self-consciousness. Therefore, an essential next step is to determine what factors may, in turn, predict self-objectification. Such an exploration may allow us to then design and implement programs that effectively target its development. Furthermore, a more detailed examination of the repercussions is warranted. Specifically, beyond body shame, are there other body image or eating disturbances related to self-objectification? A second study (see below) was designed to address this question.

Study Two

Given that self-objectification as measured by OBC-Surveillance does appear to be an independent predictor of body shame apart from other similar constructs, this construct warrants further investigation. An important next step is to examine what factors may be linked with the development of self-objectification. The majority of girls and women are bombarded by media images of sexually objectified women and are wellaware of the importance of physical appearance to their social success, and yet only a subset of these individuals experience maladaptive levels of self-objectification. If we are

able to identify variables associated with heightened levels of self-objectification we can begin to design both prevention efforts to reduce self-objectification's occurrence and impact,and treatment protocols to reduce self-objectification once it is already present.

Family and Peer Influences on Thin Ideal Internalization and Body Dissatisfaction

As noted, the study of self-objectification is a fairly recent development. Consequently, there has been minimal research examining the specific links between self-objectification and family and peer factors, such as appearance-related teasing or the importance that family and friends place upon weight and shape (Lee & Johnson, 2009). There is reason to conjecture that these social influences may be important antecedents in the development of self-objectification. In particular, there is a strong body of evidence linking these social factors to the internalization of the thin ideal, body dissatisfaction, and eating disorder symptomatology; variables which have all been associated with self-objectification. Furthermore, Objectification Theory posits that girls and women engage in self-objectification because it is modeled as an appropriate means of physical self-monitoring. While the media are viewed as a primary conduit by which individuals learn this behavior, it is possible that pressure and influence from family and friends could similarly influence an individual to engage in self-objectification. This pressure could be both direct and indirect. For example, family and friends could directly model objectifying and self-objectifying behaviors. However, when family and friends engage in dieting behaviors, make self-deprecating remarks about their own or others' physical appearance, or pressure others to diet, this could indirectly influence an individual to engage in self-objectification because the individual feels pressured to monitor her appearance so that it is not the subject of ridicule.

Lowes and Tiggemann (2003) reported that amongst a sample of girls ages 5-8, thin ideal internalizationwas predicted by their perception of their mothers' body dissatisfaction. Specifically, when girls perceived their mothers to have a higher level of body dissatisfaction, the girls were more likely to internalize the thin ideal and choose thinner ideal figures for themselves than were girls who did not have these perceptions of their mothers. In a slightly older sample of girls (ages 9-12), Sands and Wardle (2003) found that maternal weight-related attitudes and behaviors were related to girls' awareness of and internalization of the thin ideal. The more that daughters believed their mothers were concerned about their own weight and eating, the more these daughters internalized the thin ideal. Thus it appears that mothers' body dissatisfaction, or at least their daughters' *perception* of their mothers' body dissatisfaction, contributes to daughters' internalization of the thin ideal. One explanation offered for this relationship is that by professing body dissatisfaction in the presence of their daughters, mothers are impressing upon their daughters the importance of a slender physique, which the daughters then proceed to internalize (Sands & Wardle, 2003).

As opposed to earlier studies which examined the links between mothers, daughters and thin ideal internalization (Lowes & Tiggemann, 2003), Agras and colleagues (2007) found that highbody dissatisfaction amongst *fathers*at the time that the children were infants put normal-weight children at risk to internalize the thin ideal by late childhood. The authors conjectured that fathers' own body dissatisfaction may lead them to be sensitive to their daughter's or spouse's weight, and may influence the fathers to overtly or covertly convey disapproval of fatness to them. Interestingly, the authors also found that among overweight children whose fathers had *low* body dissatisfaction,

parental teasing about weight in late childhood (ages 8-9) predicted thin ideal internalization. Additionally, for this same group of children, when parents discouragedtheir children from eating certain foodsand/or set food limits with their children at age three, these children were more likely to internalize the thin ideal. For both normal and overweight children, parents' criticism of their children's weight was positively correlated with children's internalization of the thin ideal. Keery and colleagues (2005) found similar results in their study of girls in grades 6-8. When girls reported that their family members, particularly their fathers and siblings, teased them about their weight, they were more likely to internalize the thin ideal.

In a similar vein of study, researchers have examined the influence of parents on their daughters' body image in regards to a variable related to body dissatisfaction: weight concerns. Weight concerns encompass fear of becoming fat and a desire to be thinner. There is evidence from samples of girls as young as five years old that maternal weight concerns significantly predicted the daughters' weight concerns(Davison, Markey, & Birch, 2000). Davison and colleagues (2000) did not measure whether mothers were directly communicating their weight concerns to their daughters, but they speculated that mothers were either directly communicating or modeling these concerns.Another study found that family member's concerns with weight may have left girls vulnerable to making their own bodies targets of harsh assessment (Leung, Schwartzman, & Steiger, 1996). Thisfactor placed girls at a particular risk for body image and eating concerns, because girls in these situations were more likely to translate general feelings of low self-esteem and ineffectiveness into low body esteem. In an older group of females, college undergraduates, Twamley and Davis (1999) found that when women had low levels of

past family influence to control their weight they were less likely to internalize the thin ideal.

As noted above, appearance-related teasing by family members is linked to increased body dissatisfaction (Keery et al., 2005). Evidence suggests that teasing from peers may also contribute to poor body image and internalization of the thin ideal. In a sample of American and European college students, weight and appearance-related teasing was significantly related to body image disturbance as well as awareness of cultural ideals of attractiveness (Mautner, Owen, & Furnham, 2000). Doht and Tiggemann (2006) measured peer interaction, media exposure, desire for thinness, and appearance satisfaction among girls ages 5-8 on two occasions, one year apart. Results indicated that the more girls perceived at Time 1 that their peers wanted to be thin, the more girls themselves desired a thin physique at Time 2. Exposure to appearance-focused television shows and magazines did not predict the desire for thinness.

In sum, parents' and peers' teasing, criticism, and efforts to control girls' and women's weight have been linked tothese individuals internalizing the thin ideal and developing body dissatisfaction. In Study One we found that self-objectification significantly predicted body shame in our sample of college students. Objectification theory proposes that girls and women receive messages about the importance of physical attractiveness from society at large and subsequently engage in self-objectification, and we hypothesize that an important conduit of these messages are family and friends.

Media Influences on Thin Ideal Internalization and Body Dissatisfaction

As noted above, Doht and Tiggeman (2006) found that media exposure was not related to internalization of the thin ideal or body dissatisfaction. For another sample of

girls (ages 9-12), Clark and Tiggemann (2006) measured their amount of exposure to appearance-focused television and magazines, and tracked the amount of appearance-related conversations the girls had with their peers. The authors also measured peer appearance norms by asking about the girls' perception of how important physical appearance was to their friends. The girls were given explicit measures of thin ideal internalization and body dissatisfaction. Results indicated that not only were peer influences on internalization of the thin ideal stronger than media influences, but the strongest predictor of increased thin ideal internalization was increased peer appearance-related conversations. Additionally, girls who perceived that their friends were more dissatisfied with their own bodies were also more likely to have internalized the thin ideal. In terms of media effects, thin ideal internalization was *not* predicted by appearance-related magazine exposure, but it *was* predicted by appearance-related television exposure. The influence of appearance media exposure as a whole upon thin ideal internalization was indirect, with appearance media exposure predicting appearance conversations, which in turn predicted internalization. These results support those of Doht and Tiggemann (2006), suggesting that *perception* of peer concern with weight and shape may in part determine whether girls experience internalization of the thin ideal.

Findings from Stice, Spangler, and Agras (2001) further solidify the evidence suggesting that appearance-related magazine exposure does not have a significant impact upon thin ideal internalization. The authors gave a free 15-month subscription of an appearance-focused magazine (Seventeen Magazine) to half of their sample of 13-17 year old adolescent girls, and measured thin ideal internalization at the end of this subscription period. Results indicated that girls who received the subscription did *not* have a

significantly higher degree of thin ideal internalization than girls who did not receive the subscription. This same finding held true even for the girls who had high levels of thin ideal internalization at baseline. Thus, results from several recent studies indicate that exposure to appearance-related magazines does not lead to stable increased internalization of the thin ideal.

Furthermore, in a sample of female undergraduates, Stice and colleagues (1994) measured participants' amount of appearance-related magazine and television exposure and gender role endorsement. The authors did not find a direct relationship between media exposure and thin ideal internalization. Instead, heightened media exposure predicted increased traditional gender-role endorsement, which in turn predicted increased thin ideal internalization. Along similar lines, Hawkins and colleagues (2004) found that college women's experimental exposure to thin ideal media images did *not* result in heightened internalization and in fact, the *control* group, which was exposed to media which did not contain images of people (i.e., cars, perfume, etc.), had higher levels of internalization at the conclusion of the experiment.

Taken as a whole, research examining the effects of media influences on internalization of the thin ideal and body dissatisfaction has yielded mixed results. Exposure to media images which portray the thin ideal has a small effect upon thin ideal internalization in young girls, adolescents, and undergraduate women.

Internalization of the thin ideal and self-objectification. As described above, there is a thorough body of evidence linking internalization of the thin ideal to the influence of family and peers, teasing, and media exposure. Internalization of the thin ideal is theoretically linked to self-objectification, in that Objectification Theory suggests

that in order for self-objectification to lead to body dissatisfaction and disordered eating, it must also be accompanied by internalization of the thin ideal (Fredrickson & Roberts, 1997). Specifically, if someone has internalized the thin ideal *and* is engaging in physical self-surveillance, it becomes more likely that she or he will feel inadequate for failing to live up to this societal ideal and as a result, body image disturbance and disordered eating may ensue.

The Current Study

Given that teasing, parental and peer influence on weight and shape, and to some extent, media exposure are linked with internalization of the thin ideal and body dissatisfaction, one can predict how self-objectification might be related to these social variables. Specifically, it was hypothesized that parental and peer appearance-based teasing, and the importance that peers and parents place upon appearance, would predict heightened self-objectification. In each case, it was expected that the influence of peers and parents would be significantly linked with young women's self-surveillance; namely, their propensity to monitor their appearance from a third-person perspective. The proposed relationship between self-objectification and media influence was less clear but it was deemed worthwhile to examine in the current study nonetheless.

The current study also attempted to examine the preliminary support for relationships between self-objectification and eating disordered thoughts and behaviors (Calogero et al., 2005). See Figure 1 for a model of these hypotheses. It was hypothesized that:

1) Greater family and peer influence regarding weight and shape would be associated with heightened self-objectification.

2) Appearance-related teasing would be positively related to self-objectification.
3) Awareness of the thin ideal as presented in the media would be positively related to self-objectification.
4) Self-objectification would be positively related to eating disorder symptomatology and body image, such that higher levels of eating disorder symptomatology and higher body dissatisfaction would be associated with heightened self-objectification.
5) Self-objectification would mediate the relationship between body shape concerns and eating disorder symptoms and the three following variables: a) influence of family and friends, b) appearance-related teasing, and c) media awareness.

One should note that internalization of the thin ideal is included in this model as a potential mediator between family and peer influence, appearance-related teasing, awareness of the thin ideal, and body image disturbance and disordered eating. As stated above, these relationships have existing support in the literature, and thus no additional individual hypotheses were made. However, it is important to note that internalization of the thin ideal is hypothesized to play an integral role in this model.

Study 2 Method

Participants

A total of 204female undergraduates ages 18 and older were recruited from psychology classes at the University of New Mexico to participate in this study. Participants were able to enroll in the study using the Psychology Department's Online Research Credits Web System. Exclusions included women who were not fluent in English and women who had enrolled in Study 1 (described above).

The majority of the participants were either non-Hispanic, white (49.5%) or Hispanic (37.7%). The ethnic breakdown of the participants is provided in Table 4. Mean age for the sample was 19.44 (*SD*=3.47), with a range from 18 to 55. Mean BMI for the sample was 23.56 (*SD*=4.86), with a range from 15.14 to 42.01. Seven and eight tenths percent of the sample fell in the underweight range, 65.7% were in the normal weight range, and 26.5% fell in the overweight range.

Measures

Aside from the Demographics Questionnaire, which was always presented first, questionnaires were presented in a counterbalanced order across participants.

Demographics Questionnaire (See Appendix A). The Demographics Questionnaire was used to gather information regarding participants' age, ethnicity, height and weight. Height was self-reported, and weight was measured during the study session.

Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996; See Appendix B). The OBCS, a measure of self-objectification, is comprised of three subscales: Surveillance, Body Shame, and Control Beliefs. The Surveillance scale measures the degree to which individuals view their physical body from a third-person perspective. The Body Shame scale measures the degree to which individuals ascribe to cultural body standards and feel ashamed if they do not meet these standards. The Control Beliefs scale measures the degree to which individuals believe they can control their weight and shape. Each subscale has 8 items which are rated on a seven point scale from 1 (strongly disagree) to 7 (strongly agree). Fourteen of the items are reverse-scored. Higher scores correspond with higher levels of surveillance, body shame, and control

beliefs. This questionnaire was used to measure levels of self-objectification. The OBCS has demonstrated high internal reliability and good construct validity (McKinley & Hyde, 1996). Cronbach's alpha for the Surveillance subscale in the current sample was .84.Cronbach's alpha for the total questionnaire was .78.

Self-Objectification Questionnaire (SOQ Fredrickson, Noll, Roberts, Quinn, & Twenge, 1998; See Appendix C). The SOQ asks participants to rank order 10 body attributes, rating how important they believe each attribute to be (0= least important, 9= most important). Five of the attributes are appearance-based (e.g., sex appeal, physical attractiveness) and five are competency-based (e.g., physical coordination, physical fitness level). A total for this scale is computed by summing the total of the ranks for the five appearance-based attributes and subtracting the sum total of the ranks for the five competency-based attributes. Total scores range from -25 to +25. Higher scores indicate a greater degree of self-objectification. This scale has demonstrated adequate construct validity (Noll & Fredrickson, 1998).

Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004; See Appendix H). The SATAQ-3 is composed of 30 statements which individuals are instructed to rate on a five point scale from 1 (definitely disagree) to 5 (definitely agree). The SATAQ-3 yields five subscales: (1) Information – which measures the degree to which an individual acknowledgesthat TV, magazines, advertisements, and celebrities offer information about what is attractive, (2) Internalization-Athlete - which measures how strongly an individual ascribes to athletic-looking standards of attractiveness, (3) Internalization-General - which measures how strongly an individual ascribes to thinness as the standard for attractiveness, (4)

Internalization-Total - which is the summed score of the Internalization-General and Internalization-Athlete subscales, and (5) Pressures - which measures to what degree an individual feels pressured to embody these standards of attractiveness. For the current study, the Internalization-General scale was used to measure internalization of the thin ideal and the Information scale measured awareness of attractiveness ideals presented by the media. The subscales of the SATAQ-3 have demonstrated excellent convergent validity with measures of body image dissatisfaction and disturbed eating (Thompson et al., 2004). Cronbach's alpha was .93 for both of these scales.

Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987; See Appendix I). The BSQ is comprised of 34 items which measure concerns about body shape. Individuals are asked to rate the statements according to how they have been feeling about their appearance in the past four weeks. The items are scored on a six point scale from 1 (never) to 6 (always). Higher scores indicate higher degrees of body dissatisfaction. The BSQ demonstrates good test-retest reliability and concurrent reliability (Rosen, Jones, Ramirez, & Waxman, 1996). The BSQ was used in this study to measure body shape concerns. Cronbach's alpha for the current sample was .98.

Bulimia Test-Revised (BULIT-R; Thelen, Farmer, Wonderlich, & Smith, 1991; See Appendix J). The BULIT-R is comprised of 36 items, 28 of which make up a total score measuring bulimic tendencies. The items are scored on a five point scale in which a score of five indicates extreme eating disturbance and a score of one indicates the absence of a disturbance. The BULIT-R has demonstrated good internal consistency, temporal stability, and construct validity (Brelsford, Hummel, & Barrios, 1992). The BULIT-R has a cut-off score of 104 for identifying eating pathology in clinical

populations and 85 in non-clinical populations (Thelen et al., 1991). The BULIT-R was used in the current study to measure eating disorder symptomatology, especially those symptoms most often associated with bulimia nervosa. Cronbach's alpha for the current sample was .93.

Eating Attitudes Test-26 (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982; See Appendix K). The EAT-26 is comprised of 26 statements which measure thoughts, feelings, and behaviors associated with anorexia nervosa. Items are rated on a six point scale, ranging from "always" to "never", in which "always" is scored a 3, "usually" is scored a 2, and "often" is scored a 1. The choices "sometimes", "rarely", and "never" are scored as zeros. One of the items is reverse-scored. The EAT-26 has been normed and validated among normal and clinical populations (Garner et al., 1982). The EAT-26 was used in the current study to measure eating disorder symptomatology, particularly anorexic attitudes and behaviors. Cronbach's alpha for the current sample was .88.

Family and Friends Scale (FFS; adapted from Karazsia, 2005; Myers & Crowther, 2007; See Appendix L). The FFS is composed of 20 statements which measure the influence of family and friends regarding weight and shape. The items are rated on a four point scale from 1 (strongly disagree) to 4 (strongly agree). The FFS yields four subscales: Maternal Influence, Paternal Influence, Sibling Influence, and Friend Influence. These subscales were used to determine the degree of influence mothers, fathers, siblings, and peers have on self-objectification. Each of these scales measures the degree to which these figures influence an individual to lose weight, keep from gaining weight, diet, or be concerned with one's appearance. These subscales also measure the degree to which mothers, fathers, siblings and peers diet or are concerned

with their own appearance. This measure was used in the current study to determine the degree of influence family and friends have on weight and shape concerns. The total score for this measure was used, rather than the subscales. Cronbach's alpha for the current study was .92.

Perception of Teasing Scale (POTS; Thompson, Cattarin, Fowler, & Fisher, 1995; See Appendix M). The POTS is comprised of 11 statements about the experience of being teased. Individuals rate the frequency with which they experienced these events on a five point scale from 1 (never) to 5 (very often). Individuals also are instructed to rate how upset they were by these different types of teasing on a five point scale from 1 (not upset) to 5 (very upset). Individuals do not rate how upset they were if they indicate that they have never been teased in a particular way. The POTS yields four subscales: General Weight Teasing-Frequency, General Weight Teasing- Effect, Competency Teasing-Frequency, and Competency Teasing- Effect. The General Weight subscales measure how often an individual was teased about his or her weight and how upset she was by this teasing, while the Competency Teasing subscales measure how often an individual was teased about her general cognitive and social abilities and how upset she was by this teasing. The POTS has demonstrated good internal consistency and test-retest reliability (Thompson et al., 1995). This measure was included in the current study to determine the degree to which individuals were teased about their appearance. Cronbach's alpha for the current study was .96.

Procedure

Upon arrival for the study, participants signed an informed consent document (see Appendix N) and were given instructions for filling out the questionnaires described

above. Following completion of the questionnaires, participants were weighed by the experimenter in private. Participants were then debriefed as to the purpose of the study and given a list of relevant mental health referrals.

Study 2 Results

Characteristics of the Sample

None of the 204 individuals who signed up for this study were excluded. The majority of the current sample were either white (n=101, 49.5%) or Hispanic (n=77, 37.7%). A full ethnic breakdown of the current sample can be found in Table 5. Mean scores for all variables of interest were calculated and can be found in Table 6. Body Mass Index (BMI) for the sample was in the normal range, (M=23.55, SD=4.86), although the mean BMIs for African American (M= 29.69, SD=8.84) and Native American (M= 27.36, SD=4.75) participants were in the overweight range. African Americans had a significantly higher BMI than White participants or participants who placed themselves in the Other ethnic group category (p<.05). There were no ethnic differences on any other variables of interest.

Self objectification variables. The mean OBC-Body Shame score for the total sample was 3.18 (SD= 1.19). Scores on this scale range from 1 to 7, with higher scores indicating higher levels of body shame. The mean OBC- Surveillance score for the total sample was 4.70 (SD= 1.10), which is also measured on a scale of 1 to 7, with higher scores indicating higher levels of body surveillance. Mean score on the SOQ was -1.31 (SD= 14.38). Scores on this scale range from -25 to 25, with higher scores being indicative of higher levels of self-objectification.

Body image and disordered eating variables. The mean BSQ score was 90.87 (*SD*= 37.96). The mean EAT-26 score was 10.16 (*SD*= 8.62), which falls below the clinical cut-off score of 20 (Nelson, Hughes, Katz, & Searight, 1999). The mean BULIT-R score was 54.48 (*SD*= 18.64), which falls well below the clinical cut-off score of 104, as well as the cut-off score of 85 used in non-clinical samples (Thelen et al., 1991). The mean SATAQ-3 Internalization score was 28.43 (*SD*= 9.73) and the mean Information score was 26.15 (*SD*= 9.24).

Teasing and Family/Peer Influence on Weight. The POTS mean score was 20.82 (*SD*=6.61), and the FFS mean score was 52.06 (*SD*= 14.13).

Plan for Data Analysis

One of the main goals of this study was to test whether weight-related teasing, pressure from friends and family to diet and be attractive, and awareness of ideals of physical attractiveness presented in the media would exert an influence on levels of self-objectification and internalization of the thin ideal. A second goal of this study was to test whether self-objectification and internalization of the thin ideal exert an influence on the expression of body image disturbance and eating disorder symptomatology. A model of self-objectification and internalization of the thin ideal among female college students was estimated by assessing the predictive validity of model constructs in relation to self-objectification and internalization of the thin ideal, and by then determining whether these variables influenced the expression of body image disturbance and eating disorder symptomatology (see Figure 1 for proposed relationships). A latent variable labeled "body image disturbance and eating pathology" was created and was composed of BSQ, BULIT-R, and EAT-26 scores.

Model of self-objectification and thin-ideal internalization. The correlation matrix for all the variables included in the modeling is shown in Table 7. The model in Figure 1 was then estimated, and it exhibited marginal fit, χ^2 (15, N=204) = 46.41, p<.001); comparative fit index (CFI) = .96; root-mean-square error of approximation (RMSEA) = .124; 90% confidence intervals (CI) of the RMSEA = .084-.164; standardized root-mean-square residual (SRMR) = .068. Standardized parameter estimates and significance levels appear in Figure 1. This model accounted for 52% of the variability in eating pathology.

Because model 1 demonstrated suboptimal fit, a second model was estimated wherein a direct path from weight-related teasing to the expression of body image disturbance and eating disorder symptomatology was hypothesized, as well as a direct path from influence of family and peers to be attractive to body image disturbance and eating disorder symptomatology. This model exhibited adequate fit, χ^2 (13, N=204) = 24.69, p=.02); CFI = .98; RMSEA = .081; 90% CI = .028-.129; SRMR = .022. This model demonstrated significantly superior fit to Model 1, $\Delta\chi^2$ (2, N = 204) = 21.35, p < .001. However, the three paths from influence of friends and family to self-objectification and internalization of the thin ideal were weak and non-significant (betas < .02, p's > .05). These paths were removed, and the final model (Model 3) demonstrated equivalent fit to the previous, χ^2 (13, N=204) = 29.29, p=.02, $\Delta\chi^2$ (2, N = 204) = 4.60, p = *ns*; CFI = .98; RMSEA = .078; 90% CI = .029-.121; SRMR = .027. This final model accounted for 60% of the variance in eating pathology. The final model appears in Figure 2. The SOQ did not predict body image disturbance and eating pathology, while the OBC-Surveillance subscale did. This model was run again with the OBC-Surveillance removed, and the SOQ still did not significantly predict body image disturbance and

eating pathology. Path analyses were also run with just the Hispanic subsample and just the Caucasian subsample. Results revealed no significant difference between the models that best fit for these subsamples and the sample as a whole

Discussion for Study 2

For the current study we hypothesized that greater family and peer influence regarding weight and shape, appearance-related teasing, and media awareness would be associated with heightened self-objectification. Additionally, it was proposed that internalization of the thin ideal would be positively related to self-objectification, as demonstrated in Study One. It was also hypothesized that higher levels of eating disorder symptomatology and greater body dissatisfaction would be associated with heightened self-objectification. Finally, it was hypothesized that self-objectification would mediate the relationship between body shape concerns and eating disorder symptoms and the three following variables: a) influence of family and friends, b) appearance related teasing, and c) media awareness. One should first note that the scores for the current sample on all questionnaires were comparable those in Study One and to other samples of college women (Basow et al., 2007; Boerner, Spillane, Anderson, & Smith, 2004; Fernandez, Malcarne, Wilfley, & McQuaid, 2006; Greenleaf et al., 2006; Muehlenkamp et al., 2002; Myers & Crowther, 2007; Nelson, Hughes, Katz, & Searight, 1999; Thompson, et al., 1995, 2004).

Path analysis revealed that many of these proposed relationships did exist in the current data set, although there were some notable exceptions. Our first hypothesis was not supported in the current study. We had hypothesized that parental and peer pressure to diet and lose weight would be positively correlated with self-objectification. We had

additionally predicted in hypothesis five that the relationship between parental and peer pressure to diet and lose weight and body image disturbance and disordered eating would be mediated by self-objectification. In fact, while parental and peer pressure to diet and lose weight *did* significantly predict disordered eating and body dissatisfaction, this pressure was not significantly related to self-objectification as operationalized by either self-objectification questionnaire. These results seem to run counter to relationships proposed by Objectification Theory, which predicts that messages from our environments about the importance of monitoring our appearances lead to an increase in body surveillance and shame. The results from the current study suggest that there is some other variable aside from self-objectification that explains the relationship between family pressure and body image disturbance and disordered eating.

In line with our second hypothesis, our results indicate that when individuals endorse being teased about their appearance, and specifically about their weight, they also endorse engaging in self-objectifying cognitions and behaviors, as measured by both self-objectification questionnaires. These results are in keeping with Objectification Theory, which proposes that pressure from society to be thin and attractive exerts influence on individuals to ascribe to these ideals and to monitor themselves to determine adherence to these ideals (Fredrickson & Roberts, 1998).

Interestingly, while teasing and self-objectification were both positively correlated with disordered eating and body image disturbance, when self-objectification was operationalized as the SOQ score it did *not* mediate the relationship between teasing and disordered eating and body image disturbance. Thus, hypothesis five was not supported; presumably because the SOQ did not significantly predict the eating

pathology latent variable. Instead, teasing was very strongly related to disordered eating and body image disturbance independent of its relationship with the SOQ. Self-objectification as operationalized by the OBC-Surveillance subscale fully mediated the relationship between teasing and disordered eating and body image disturbance. These findings lend partial support to the proposed mechanisms by which self-objectification is supposedly developed, but also suggest that appearance-related teasing is strongly related to disordered eating and body image disturbance for reasons apart from the influence of self-objectification (Fredrickson & Roberts, 1997). The extant literature reports that teasing is related to lowered self-esteem, depression, and one study has demonstrated that the relationship between teasing and eating/body image problems may be due to an increase in comparing one's body to others (Keery et al., 2005; Thompson, Coovert & Stormer, 1999). It is reasonable to conjecture that increased body comparison may explain the relationship between appearance-related teasing and eating/body image problems in the current study.

Results also indicated that awareness of beauty ideals that are portrayed in the media was a significant predictor of self-objectification as measured by both the SOQ and OBC-Surveillance. In turn, the OBC-Surveillance scale, but not the SOQ, predicted eating disordered behavior and body image disturbance. Thus, our third hypothesis was partially supported. In fact, self-objectification, measured by the OBC-Surveillance, mediated the relationship between media awareness and disordered eating and body image disturbance. This finding supports the third part of hypothesis five. The SOQ did not mediate the relationship between media awareness and eating disordered behavior/body image disturbance because the SOQ did not predict the latent body image

and disordered eating variable. These results are interesting given the mixed results found in the literature which do not conclusively suggest that media awareness of beauty ideals contributes to disordered eating and body image disturbance (Clark & Tiggeman 2006; Doht & Tiggeman 2006; Stice et al., 2001). A possible explanation for these results might be that one of the most common influences on the objectification of girls and women is the media. Therefore, it stands to reason that when women are presented with direct examples of this objectification, accompanied by the message that these images are the physical ideal which women should strive to attain, ultimately this may lead to self-objectification as a means of monitoring the self to assess adherence to these physical ideals.

In the current study self-objectification, operationalized by the OBC-Surveillance subscale, predicted disordered eating and body image disturbance (hypothesis five). These results replicate those found throughout the literature (Grippo & Hill, 2008; Myers & Crowther, 2007; Rolnik, Engeln-Maddox, Miller, 2010) and echo relationships proposed by Objectification Theory. According to Objectification Theory, self-objectification leads to body image disturbance and disordered eating because being able to achieve these beauty ideals is virtually impossible (Fredrickson & Roberts, 1997; Calogero, et al., 2005). In turn, body dissatisfaction is strongly related to disordered eating, as it is often initiated in an attempt to lose weight in order to be more adherent to thin beauty ideals (Halliwell & Harvey, 2006; Stice & Shaw, 2002). Self-objectification as measured by the SOQ did *not* significantly predict body dissatisfaction and disordered eating, although self-objectification as measured by the OBCS: Surveillance scale *did*. These results support those found in Study One. The fact that the SOQ did not

significantly predict body image disturbance and disordered eating is striking, since Objectification Theory clearly states that self-objectification is a risk factor for developing these problems. The lack of relationship found in the current study suggests that the SOQ may not be an adequate operationalization of the construct of self-objectification.

General Discussion

The results of these two studies add to the extant self-objectification literature in several ways. First, Study One allowed us to clarify how self-objectification differs qualitatively from other seemingly similar variables such as public self-consciousness, self-monitoring, and social anxiety. In fact, self-objectification was able to add to the prediction of body shame beyond the variance accounted for by these other variables. Additionally, results from this study suggest that the OBC-Surveillance subscale is better able to predict body shame than the Self Objectification Questionnaire. Study One is also one of the first studies to examine these two self-objectification measures head-to-head, and the results support the existing literature which suggests that the OBC-Surveillance scale is more predictably related to body image and eating disorder variables than the SOQ (Moradi et al., 2008).

Once we established that self-objectification is a distinct construct, we then sought to determine which social influences might predict its development. Based upon the literature regarding predictors of thin ideal internalization and body image disturbance, we hypothesized that appearance-related teasing, the influence of family and peers to diet or subscribe to societal beauty ideals, and awareness of media beauty ideals would lead to increased self-objectification. Additionally, we hypothesized that self-

objectification would mediate the pathway between these variables and body image disturbance and disordered eating variables. Interestingly, self-objectification, as measured by the OBC-Surveillance subscale, did not mediate the relationships between pressure to diet from family and friends and body image disturbance/disordered eating, while teasing only partially mediated this pathway. At this time it is unclear why this mediation hypothesis was not fully supported, and replication of these results is necessary. In contrast, self-objectification, as measured by the OBC-Surveillance subscale, *did* mediate the relationship between media-generated awareness of the thin ideal and body image disturbance and disordered eating. It is possible that we found this strong relationship with media awareness, but not teasing or pressure to diet from family and friends, because media portrayals of women objectify them *directly*, whereas the processes of teasing and pressure to diet are somewhat indirectly related to objectification.

It is important to highlight the fact that across both Studies One and Two, the SOQ was not a good predictor of body image and disordered eating variables, while the OBC-Surveillance subscale acted in line with relationships proposed by Objectification Theory. As mentioned above, the SOQ is not a face-valid measure of self-objectification, while the OBC-Surveillance subscale is. Furthermore, psychometrics for the SOQ have been deemed "adequate" while those for the OBCS are considered good. These two studies present evidence to suggest that the OBC-Surveillance subscale is a superior measure of self-objectification, and that research undertaken with the SOQ should be interpreted with caution.

Limitations and Strengths

The sample for these studies was comprised entirely of female college students, and therefore our results may not be generalizable to the population at large. Still, the sample was fairly ethnically diverse, and college students are at elevated risk for body image disturbance and disordered eating. In Study Two, we are limited by the correlational nature of the results. We cannot determine the true directionality of the relationships observed between variables, as they may have been entered into the path analysis based upon flawed hypotheses. Furthermore, these two studies relied upon self-report measures, and it is entirely possible that participants were inaccurate reporters regarding their experiences and behaviors. Finally, strong psychometrics have not been established for the SOQ, as it has only demonstrated "adequate" construct validity. As a result, caution is advised when interpreting outcomes from these studies.

Nevertheless, the current studies had several strengths. Notably, this sample had a large number of Hispanic participants, which allowed us to test for differences between this subsample and the sample as a whole. Importantly, this study appears to be the first to examine the risk factors and consequences of self-objectification in Hispanic women. Given that the means of the Hispanic participants did not significantly differ from those of the full sample, we have preliminary evidence that self-objectification may be expressed similarly in Hispanics compared to the population at large.

A second strength of these studies is that they include two measures of self-objectification: the Self Objectification Questionnaire and the Objectified Body Consciousness Scale. Typically, studies have employed only one of these measures, or they have used both but contended that they were measuring different constructs (Aubrey, 2006; Basow et al 2007; Greenleaf, 2005; Greenleaf et al 2006; Miner-Rubio et

al 2002; Moradi, et al 2005; Muehlenkamp et al 2002; Slater & Tiggemann, 2002; Tiggemann & Slater, 2001). Results from Study One indicated that the Body Surveillance and Body Shame subscales of the OBCS significantly predicted internalization of the thin ideal, while the SOQ did not. These results suggest that although these questionnaires are highly correlated, they are *not* measuring the same construct. Furthermore, previous research purporting to examine the construct of self-objectification may have yielded a somewhat inaccurate or incomplete picture due to the inconsistent use of these questionnaires.

Future Directions

Results of Study One suggest that one measure of self-objectification (the OBC-Surveillance subscale) added to the prediction of body shame above and beyond the variance accounted for by public self-consciousness, self-monitoring, and social anxiety. However, this study was correlational in nature, and causality cannot be determined. To more clearly distinguish the role of self-objectification in the body image of women, experimental designs are necessary. One potentially fruitful line of research would be to replicate earlier experiments intended to measure self-objectification, but to also include measures of public self-consciousness, self-monitoring, and social anxiety. These experiments often had participants assigned to either an experimentally-manipulated "high self-objectification" group or a "low self-objectification" group. Yet it was unclear whether results found in these studies could be attributed to differences in levels of self-objectification between the two groups, or if other unmeasured variables might be accounting for these differences.

It will be important to explore the development of self-objectification through longitudinal studies so that we are truly able to determine causality, and can thus develop more appropriate prevention and treatment protocols. Along similar lines, future research should target factors that protect individuals from developing maladaptive levels of self-objectification, as this may also prove fruitful in developing effective prevention and treatment strategies. For example, results from Study Two suggest that awareness of the thin ideal in the media leads to heightened self-objectification. Stice and colleagues have developed a cognitive dissonance-based eating disorders prevention program that has been shown to reduce internalization of the thin ideal, body dissatisfaction, and dieting, by asking girls and women to formulate compelling arguments regarding the unhealthy portrayal of women's bodies in the media (McMillan, Stice, & Rodhe, 2011; Rodriguez, Marchland, Ng, & Stice, 2008; Stice, Marti, Spoor, Presnell, & Shaw, 2008). Similar programs could be implemented to determine whether they might also reduce self-objectification. Given its relation to body dissatisfaction and disordered eating, efforts towards the minimization of self-objectification are well-warranted and deserving of further attention.

Table 1. Ethnic Breakdown of Study Participants for Study One

Ethnicity	% Total Sample	n for each group (N=201)
Non-Hispanic, White	42.6	86
Hispanic	37.1	75
Other	7.9	16
Asian American/Pacific Islander	5.4	11
African American	4.0	8
Native American	2.5	5

Note. The "other" category was used to denote participants whose ethnicity did not fall within the other listed ethnic groups. In this section, participants were able to write in their ethnicity if they did not believe it fell into any of the other groups listed above.

Table 2. Mean Scores for Total Sample and by Ethnic Group in Study One.

	Total Sample	Af. Am.	As. Am.	Hisp	N.A.	W.	O
Body Mass Index	23.57 (4.22)	25.15 (5.96)	21.99 (4.23)	24.47 (4.96)	22.17 (3.25)	22.76 (3.39)	24.64 (2.80)
OBC-Body Shame	3.10 (1.14)	2.64 (0.93)	3.01 (1.17)	3.12 (1.18)	3.97 (0.99)	3.08 (1.14)	3.20 (0.99)
OBC-Surveil-lance	4.40 (0.70)	4.32 (0.54)	3.92 (0.64)	4.46 (0.73)	4.50 (0.58)	4.42 (0.69)	4.34 (0.75)
SOQ	-2.64 (13.34)	-2.43 (7.80)	-8.82 (13.67)	-2.10 (12.92)	-5.00 (15.43)	-1.29 (13.83)	-7.38 (13.21)
Self-Monitoring Scale	44.12 (6.81)	46.25 (3.73)	44.09 (7.99)	44.09 (8.54)	41.60 (6.91)	43.60 (7.76)	46.75 (6.81)
SCS: Public Self-Consciousness	16.01 (4.61)	15.75 (3.96)	13.91 (3.96)	16.52 (4.64)	18.60 (2.88)	15.63 (4.72)	16.50 (4.80)
SPIN	19.74 (11.92)	25.75 (9.71)	19.18 (9.87)	20.86 (12.43)	21.20 (10.94)	18.50 (11.87)	19.25 (13.01)

Note. Af. Am. =African American; As. Am. = Asian American/Pacific Islander; Hisp= Hispanic; N.A. = Native American; W= White; O= Other; OBC-Body Shame= Objectified Body Consciousness- Body Shame; OBC-Surveillance= Objectified Body Consciousness- Surveillance; SOQ= Self-Objectification Questionnaire; SCS= Self-Consciousness Scale; SPIN= Social Phobia Inventory

Table 3. Pearson Correlations for Variables in Study One

	1	2	3	4	5	6	7	8
1. OBC- Body Shame	-							
2. OBC-Surveillance	.379**	-						
3. SOQ total	.320**	.443**	-					
4. SCS: Public Self-Consciousness	.517**	.492**	.382**	.510**	-			
5. SPIN	.402**	.042	.130	.157*	.337**	.416**	-	
6. Self-Monitoring Scale	-.076	.086	.117	.063	.051	-.050	-.182*	-

Note. *p<.05, **p<.01. OBC-Body Shame= Objectified Body Consciousness- Body Shame; OBC-Surveillance= Objectified Body Consciousness- Surveillance; SOQ= Self-Objectification Questionnaire; SPIN= Social Phobia Inventory

Table 4. Multiple Linear Regression Predicting OBC-Body Shame.

	B	t	p
SCS-Public Self-Consciousness	.302	4.12	.000
SMS-Self-Monitoring	-.092	-1.55	.123
SPIN	.262	4.14	.000
SOQ	.119	1.78	.077
OBC-Surveillance	.175	2.45	.015

Note. OBC-Body Shame= Objectified Body Consciousness- Body Shame; OBC-Surveillance= Objectified Body Consciousness- Surveillance; SOQ= Self-Objectification Questionnaire; SPIN= Social Phobia Inventory; SCS-Public Self-Consciousness= Self Consciousness Scale- Public Self-Consciousness subscale; SMS-Self Monitoring= Self-Monitoring Scale- Self Monitoring subscale.

Table 5. Ethnic Breakdown of Study Participants for Study Two

Ethnicity	% Total Sample	N for each group (N=204)
Non-Hispanic, White	49.5	101
Hispanic	37.7	77
Native American	3.9	8
Asian American/Pacific Islander	3.4	7
Other	2.9	6
African American	2.5	5

Note. The "other" category was used to denote participants whose ethnicity did not fall within the other listed ethnic groups. In this section, participants were able to write in their ethnicity if they did not believe it fell into any of the other groups listed above.

Table 6. Mean Scores for Total Sample and by Ethnic Group for Study Two

	Total Sample	Af. Am.	As. Am.	Hisp	N.A.	W	O
Body Mass Index	23.55 (4.86)	29.69[a,b] (8.84)	22.83 (6.01)	23.94 (5.09)	27.36 (4.75)	22.89[a] (4.12)	20.71[b] (2.54)
OBC-Body Shame	3.18 (1.19)	4.10 (1.20)	2.51 (0.57)	3.12 (1.16)	3.05 (1.23)	3.21 (1.21)	3.85 (1.57)
OBC-Surveil-lance	4.70 (1.10)	5.43 (0.62)	3.93 (0.80)	4.73 (1.05)	3.84 (1.30)	4.73 (1.11)	5.21 (0.94)
SOQ	-1.31 (14.38)	-7.00 (18.81)	-3.00 (10.00)	-2.07 (13.34)	-6.75 (18.16)	-0.48 (14.90)	8.33 (12.88)
SATAQ-3: Internali-zation	28.43 (9.73)	23.50 (12.29)	22.71 (6.58)	28.99 (9.23)	20.62 (9.26)	29.32 (9.87)	28.33 (11.27)
SATAQ-3: Information	26.15 (9.24)	20.60 (10.24)	27.29 (11.07)	27.61 (9.45)	24.75 (12.46)	25.30 (8.61)	27.33 (9.79)
BSQ Total	90.87 (37.96)	97.40 (50.39)	61.86 (18.37)	87.63 (38.53)	87.50 (36.94)	94.33 (38.12)	107.33 (24.90)
BULIT-R	54.48 (18.64)	60.25 (29.36)	43.29 (4.86)	54.72 (20.62)	49.88 (13.28)	54.27 (17.08)	70.33 (19.57)
EAT-26 Total	10.16 (8.62)	12.00 (9.19)	5.00 (3.74)	10.33 (9.30)	5.62 (3.50)	10.21 (8.24)	17.67 (9.67)
FFS Total	52.06 (14.13)	40.00 (24.02)	45.67 (23.66)	51.80 (15.12)	53.33 (9.93)	53.41 (12.39)	46.67 (14.40)
POTS: Teasing Frequency	20.82 (6.61)	21.20 (5.40)	18.57 (5.68)	20.81 (7.52)	17.14 (4.56)	21.34 (6.24)	19.83 (4.26)
POTS: Teasing Impact	2.97 (1.29)	3.58 (0.99)	1.67 (0.0)	3.16 (1.37)	2.10 (0.47)	2.89 (1.25)	3.50 (2.12)

Note.[a,b] = p<.05; Af. Am. =African American; As. Am. = Asian American/Pacific Islander; Hisp= Hispanic; N.A. = Native American; W= White; O= Other; OBC= Objectified Body Consciousness; SOQ= Self Objectification Questionnaire; SATAQ-3= Sociocultural Attitudes Towards Appearances Questionnaire-3; BSQ= Body Shape Questionnaire; BULIT-R= Bulimia Test- Revised; EAT-26= Eating Attitudes Test-26; FFS= Family and Friends Scale; POTS= Perception of Teasing Scale.

Table 7. Pearson Correlations for Variables in Study Two.

	1	2	3	4	5	6	7	8	9
1.SATAQ-3: Information	_								
2. FFS	-.27**	_							
3. POTS	.26**	-.25**	_						
4. SATAQ-3: Internalization	.70**	-.21**	.31**	_					
5. SOQ	.39**	-.14	.23**	.50**	_				
6. OBCS: Surveillance	.48**	-.26**	.36**	.73**	.52**	–			
7. BSQ	.37**	-.33**	.43**	.61**	.37**	-.46**	–		
8. EAT-26	.41**	-.34**	.30**	.53**	.31**	.59**	.75**	_	
9. BULIT-R	.41**	-.30**	.31**	.58**	.34**	.48**	.82**	-.76**	–

Note. **p<.01; SATAQ-3= Sociocultural Attitudes Towards Appearances Questionnaire-3; FFS= Family and Friend Scale; POTS: Perception of Teasing Scale; SOQ= Self Objectification Questionnaire; OBCS: Objectified Body Consciousness Scale; BSQ= Body Shape Questionnaire; EAT-26= Eating Attitudes Test-26; BULIT-R= Bulimia Test-Revised.

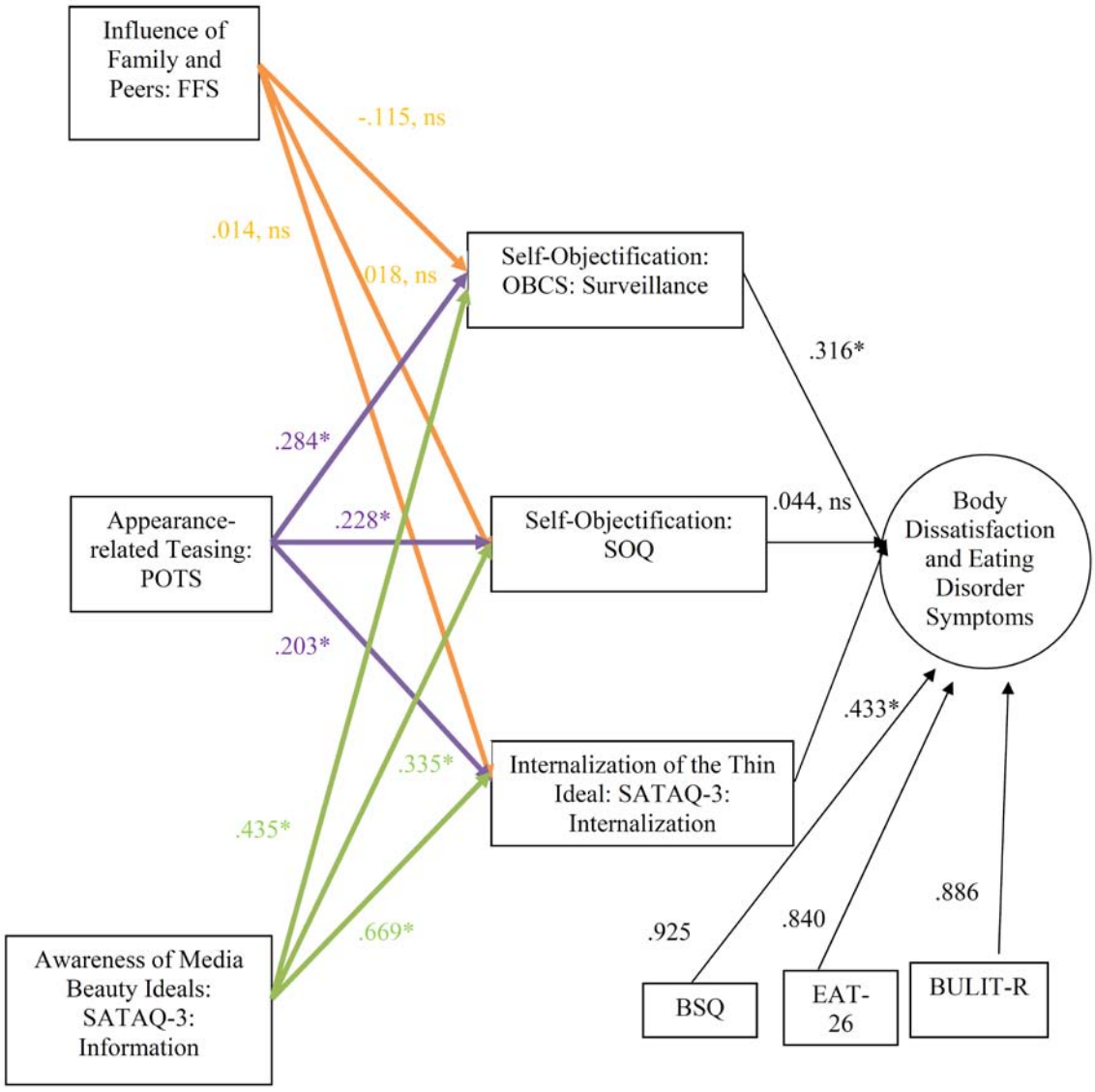

Figure 1. Hypothesized Model (Model One): Influence of Teasing, Family and Friends, Media, Internalization of the Thin Ideal and Self-Objectification on Body Shape Concerns and Eating Disorder Symptom

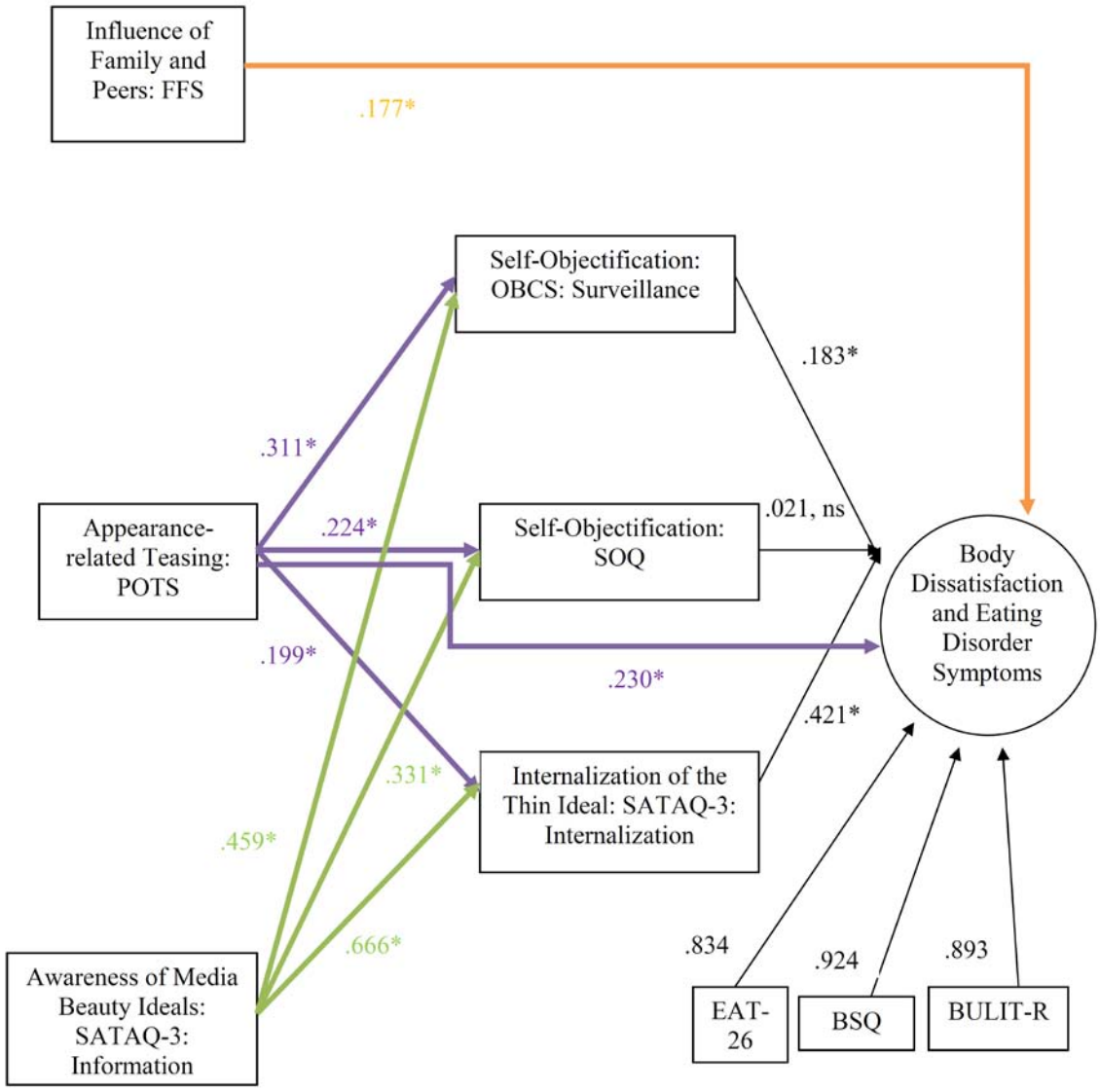

Figure 2. Initial Structural Equation Modeling Analysis (Model Three): Influence of Teasing, Family and Friends, Media, Internalization of the Thin Ideal and Self-Objectification on Body Shape Concerns and Eating Disorder Symptom

List of Appendices

Appendix A

Demographics Questionnaire

Age:_____

Ethnicity (please check one): __ African American
__ Asian American/Pacific Islander
__ Hispanic
__ Native American or American Indian
__ White, non-Hispanic
__ Other (please indicate):
_____

Height:_____ Weight:_____

Are you fluent in English (circle one)? YES NO

Appendix B
Objectified Body Consciousness Scale

INSTRUCTIONS:

Circle the number that corresponds to how much you agree with each of the statements on the following pages.

Circle NA only if the statement does not apply to you. Do not circle NA if you don't agree with a statement.

> For example, if the statement says "When I am happy, I feel like singing" and you don't feel like singing when you are happy, then you would circle one of the disagree choices. You would only circle NA if you were <u>never</u> happy.

	Strongly Disagree		Neither agree nor disagree			Strongly Agree	Does not apply
S 1. I rarely think about how I look.....	1	2	3	4	5	6	7	NA
B 2. When I can't control my weight, I feel like something must be wrong with me.	1	2	3	4	5	6	7	NA
S 3. I think it is more important that my clothes are comfortable than whether they look good on me.....……	1	2	3	4	5	6	7	NA
C 4. I think a person is pretty much stuck with the looks they are born with.....	1	2	3	4	5	6	7	NA
B 5. I feel ashamed of myself when I haven't made the effort to look my best…….	1	2	3	4	5	6	7	NA
C 6. A large part of being in shape is having that kind of body in the first place.	1	2	3	4	5	6	7	NA
S 7. I think more about how my body feels than how my body looks. .....……	1	2	3	4	5	6	7	NA
B 8. I feel like I must be a bad person when I don't look as good as I could.....	1	2	3	4	5	6	7	NA
S 9. I rarely compare how I look with how other people look.....……	1	2	3	4	5	6	7	NA

Appendix B (continued)

	Strongly Disagree			Neither agree nor disagree			Strongly Agree	Does not apply
C 10. I think a person can look pretty much how theywant to if they are willing to work at it.....1	2	3	4	5	6	7	NA	
B 11. I would be ashamed for people to know what I really weigh.....1	2	3	4	5	6	7	NA	
C 12. I really don't think I have much control over how my body looks. 1	2	3	4	5	6	7	NA	
B 13. Even when I can't control my weight, I think I'm an okay person.....1	2	3	4	5	6	7	NA	
S 14. During the day, I think about how I look many times.....1	2	3	4	5	6	7	NA	
B 15. I never worry that something is wrong with me when Iam not exercising as much as I should. 1	2	3	4	5	6	7	NA	
S 16. I often worry about whether the clothes I am wearing make me look good. ...1	2	3	4	5	6	7	NA	
B 17. When I'm not exercising enough, I question whether I am a good enough person.1 2	3	4	5	6	7	NA		
S 18. I rarely worry about how I look to other people.....1	2	3	4	5	6	7	NA	
C 19. I think a person's weight is mostly determined by the genes they are born with. 1	2	3	4	5	6	7	NA	
S 20. I am more concerned with what my body can do than how it looks. 1	2	3	4	5	6	7	NA	
C 21. It doesn't matter how hard I try to change my weight, it's probably always going to be about the same. 1	2	3	4	5	6	7	NA	

Appendix B (continued)

	Strongly Disagree			Neither agree nor disagree			Strongly Agree	Does not apply
B 22. When I'm not the size I think I should be, I feel ashamed.	1	2	3	4	5	6	7	NA
C 23. I can weigh what I'm supposed to when I try hard enough.	1	2	3	4	5	6	7	NA
C 24. The shape you are in depends mostly on your genes.	1	2	3	4	5	6	7	NA

Note. Labeled as "Thinking About Your Body" for participants. B= Body Shame subscale, C= Control Subscale, S= Surveillance subscale.

Appendix C

Self Objectification Questionnaire

We are interested in how people think about their bodies. The questions below identify 10 different body attributes. We would like you to *rank order* these body attributes from that which as the *greatest impact* on your physical self-concept (rank this a "9"), to that which has the *least impact* on your physical self-concept (rank this a "0").

Note: It does not matter *how* you describe yourself in terms of each attribute. For example, fitness level can have a great impact on your physical self-concept regardless of whether you consider yourself to be physically fit, not physically fit, or any level in between.

Please first consider all attributes simultaneously, and record your rank ordering by writing the ranks in the rightmost column.

IMPORTANT: *Do Not Assign The Same Rank To More Than One Attribute!*

9= greatest impact
8= next greatest impact
:
1= next to least impact
0= least impact

When considering your *physical self concept*…

1. … what rank do you assign to your *physical coordination?*____
2. … what rank do you assign to *health?*____
3. … what rank do you assign to *weight?*____
4. … what rank do you assign to *strength?*____
5. … what rank do you assign to *sex appeal?*____
6. … what rank do you assign to *physical attractiveness?*____
7. … what rank do you assign to *energy level (e.g., stamina)?*____
8. … what rank do you assign to *firm/sculpted muscles?*____
9. … what rank do you assign to *physical fitness level?*____
10. .. what rank do you assign to *measurements (e.g., chest, waist, hips)?*____

Note. Labeled as "What is Important About Your Body?" for participants.

Appendix D

Self-Consciousness Scale

Below you will find 23 statements about how people might think, feel, or behave. Please circle a number next to each item indicating how characteristic this statement is of you, where 0= extremely uncharacteristic and 4= extremely characteristic.

1) I'm always trying to figure myself out.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

2) I'm concerned about my style of doing things.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

3) Generally, I'm not very aware of myself.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

4) It takes me time to overcome my shyness in new situations.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

5) I reflect about myself a lot.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

6) I'm concerned about the way I present myself.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

7) I'm often the subject of my own fantasies.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

8) I have trouble working when someone is watching me.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

9) I never scrutinize myself.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

Appendix D (continued)

10) I get embarrassed very easily.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

11) I'm self-conscious about the way I look.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

12) I don't find it hard to talk to strangers.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

13) I'm generally attentive to my inner feelings.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

14) I usually worry about making a good impression.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

15) I'm constantly examining my motives.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

16) I feel anxious when I speak in front of a group.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

17) One of the last things I do before I leave my house is look in the mirror.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

18) I sometimes have the feeling that I'm off somewhere watching myself.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

19) I'm concerned about what other people think of me.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

20) I'm alert to changes in my mood.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

21) I'm usually aware of my appearance.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

22) I'm aware of the way my mind works when I work through a problem.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

23) Large groups make me nervous.

Extremely uncharacteristic 0 1 2 3 4 Extremely characteristic

Appendix E

Self-Monitoring Scale

Please circle a number from 0 to 5 indicating how true the following statements are for you:

5= certainly, always true
4= generally true
3= somewhat true, but with exception
2= somewhat false, but with exception
1= generally false
0= certainly, always false

1) In social situations, I have the ability to alter my behavior if I feel that something else is called for. 0 1 2 3 4 5

2) I am often able to read people's true emotions correctly through their eyes. 0 1 2 3 4 5

3) I have the ability to control the way I come across to people, depending on the impression I wish to give them. 0 1 2 3 4 5

4) In conversations, I am sensitive to even the slightest change in the facial expression of the person I'm conversing with. 0 1 2 3 4 5

5) My powers of intuition are quite good when it comes to understanding others' emotions and motives. 0 1 2 3 4 5

6) I can usually tell when the others consider a joke to be in bad taste, even though they may laugh convincingly. 0 1 2 3 4 5

7) When I feel that the image I am portraying isn't working, I can readily change it to something that works. 0 1 2 3 4 5

8) I can usually tell when I've said something inappropriate by reading it in the listener's eyes. 0 1 2 3 4 5

9) I have trouble changing my behavior to suit different people and different situations. 0 1 2 3 4 5

Appendix E (continued)

10) I have found that I can adjust my behavior to meet the requirements of any situation I find myself in. 0 1 2 3 4 5

11) If someone is lying to me, I usually know it at once from that person's manner of expression. 0 1 2 3 4 5

12) Even when it might be to my advantage, I have difficulty putting up a good front. 0 1 2 3 4 5

13) Once I know what the situation call for, it's easy for me to regulate my actions accordingly. 0 1 2 3 4 5

14) I tend to show different sides of myself to different people. 0 1 2 3 4 5

15) It is my feeling that if everyone else in a group is behaving in a certain manner, this must be the proper way to behave. 0 1 2 3 4 5

16) I actively avoid wearing clothes that are not in style. 0 1 2 3 4 5

17) In different situations and with different people, I often act like very different persons. 0 1 2 3 4 5

18) At parties I usually try to behave in a manner that makes me fit in. 0 1 2 3 4 5

19) When I am uncertain how to act in a social situation, I look to the behavior of others for cues. 0 1 2 3 4 5

20) Although I know myself, I find that others do not know me. 0 1 2 3 4 5

21) I try to pay attention to the reactions of others to my behavior in order to avoid being out of place. 0 1 2 3 4 5

22) I find that I tend to pick up slang expressions from others and use them as part of my own vocabulary. 0 1 2 3 4 5

23) Different situations can make me behave like very different people. 0 1 2 3 4 5

Appendix E (continued)

24) I tend to pay attention to what others are wearing. 0 1 2 3 4 5

25) The slightest look of disapproval in the eyes of a person with whom I am interacting is enough to make me change my approach. 0 1 2 3 4 5

26) Different people tend to have different impressions about the type of person I am. 0 1 2 3 4 5

27) It's important to me to fit in to the group I'm with. 0 1 2 3 4 5

28) My behavior often depends on how I feel others wish me to behave. 0 1 2 3 4 5

29) I am not always the person I appear to be. 0 1 2 3 4 5

30) If I am the least bit uncertain how to act in a social situation, I look to the behavior of others for cues. 0 1 2 3 4 5

31) I usually keep up with the clothing style changes by watching what others wear. 0 1 2 3 4 5

32) I sometimes have the feeling that people don't know who I really am. 0 1 2 3 4 5

33) When in a social situation, I tend not to follow the crowd, but instead behave in a manner that suits my particular mood at the time. 0 1 2 3 4 5

Appendix F

Social Phobia Inventory

Please choose the answer that best describes how much the following problems have bothered you during the past week. Circle only one number for each problem and be sure to answer all items.

	Not at all	A little bit	Somewhat	Very much	Extremely
1. I am afraid of people in authority.	0	1	2	3	4
2. I am bothered by blushing in front of people.	0	1	2	3	4
3. Parties and social events scare me.	0	1	2	3	4
4. I avoid talking to people I don't know.	0	1	2	3	4
5. Being criticized scares me a lot.	0	1	2	3	4
6. Fear of embarrassment causes me to avoid doing things or speaking to people.	0	1	2	3	4
7. Seating in front of people causes me distress.	0	1	2	3	4
8. I avoid going to parties.	0	1	2	3	4

Appendix F (continued)

9. I avoid activities in which I am the center of attention.	0	1	2	3	4
10. Talking to strangers scares me.	0	1	2	3	4
11. I avoid having to give speeches.	0	1	2	3	4
12. I would do anything to avoidbeing criticized.	0	1	2	3	4
13. Heart palpitations bother mewhen I am around people.	0	1	2	3	4
14. I am afraid of doing things when people might be watching.	0	1	2	3	4
15. Being embarrassed or looking stupid are my worst fears.	0	1	2	3	4
16. I avoid speaking to anyone inauthority.	0	1	2	3	4
17. Trembling or shaking in front of others is distressing to me.	0	1	2	3	4

Note. Labeled as “Attitudes Toward Social Situations” for participants.

Appendix G

CONSENT TO PARTICIPATE IN RESEARCH

You are invited to participate in a research study conducted by Loren Gianini, M.S., from the Psychology Department at the University of New Mexico. This study is being conducted for the completion of Loren Gianini's dissertation. You were identified as a possible volunteer in the study because of your age, gender, and your fluency in English.

PURPOSE OF THE STUDY:The purpose of the current study is to examine how people think about themselves and their bodies.

PROCEDURES AND ACTIVITIES You will be asked to complete eight questionnaires. One questionnaire will ask about basic demographic information. As a part of this demographic information collection, you will be weighed. Four of the questionnaires will ask about how you think about yourself and monitor your behavior. One questionnaire will ask about different feelings you may have in social situations, and one questionnaire will ask you to indicate how you would react to different situations. Another questionnaire will ask about how you think about society's beauty ideals. These eight questionnaires should take approximately one hour total to complete.You will not receive payment for this study. You will receive one research credit for your participation.

POTENTIAL RISKS AND DISCOMFORTS It is possible that you may experience some boredom, distress or discomfort while filling out the questionnaires. If you are feeling upset, please feel free to contact Loren Gianini, the experimenter, at lgianini@unm.edu, or Dr. Jane Ellen Smith, a psychology professor, clinician and faculty advisor for this experiment, at 277-2650, or Dr. Dan Matthews, the director of the UNM psychology clinic, at 277-5164, or page him at 951-1617, to discuss how you are feeling. You can receive medical or psychological attention at the Student Health Center (Building 73) at the University of New Mexico, by calling 505-277-3136, or as a walk-in.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY There is no benefit to you for your participation. We hope that the results of this study will give us helpful information about how people think about themselves and their bodies.

CONFIDENTIALITY Any information obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law.Your questionnaires and data will be labeled using a number and not your name. This information will be stored in a locked office at the University of New Mexico. The questionnaires will be stored separately from your consent form and there will be no way to link your consent form with your questionnaires. Identifying information will not be given in any paper that may be written as a result of this study.

Appendix G (continued)

PARTICIPATION AND WITHDRAWAL You can choose whether to participate in this study or not. If you volunteer to participate, you may withdraw at any time without penalty or loss of

benefits to which you might otherwise be entitled. You may also refuse to answer any questions you do not want to answer and still remain in the study. By signing this consent form, you are not waiving any legal claims, rights or remedies because of your participation in this research study.

IDENTIFICATION OF INVESTIGATORS AND REVIEW BOARD If you have any questions or concerns about the research, please feel free to contact: If you have any questions or concerns about the research, please feel free to contact: Loren Gianini at lgianini@unm.edu or Dr. Jane Ellen Smith at the University of New Mexico, Department of Psychology, Logan Hall, 1 University of New Mexico, Room 116, Albuquerque, NM 87131, (505) 277-2650. If you have other concerns or complaints, contact the Institutional Review Board at the University of New Mexico, 1717 Roma NE, Room 205, Albuquerque, NM 87131, (505) 277-2257, or toll free at 1-866-844-9018.

SIGNATURE OF RESEARCH PARTICIPANT

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been provided a copy of this form.

_____

Name of Participant (please print)

_____ _____

Signature of Participant Date

SIGNATURE OF INVESTIGATOR

In my judgment the participant is voluntarily and knowingly providing informed consent and possesses the legal capacity to give informed consent to participate in this research study

_____

Name of Investigator or Designee

Signature of Investigator or Designee Date

Appendix H

Sociocultural Attitudes Towards Appearances Questionnaire-3

Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

Definitely Disagree= 1
Mostly Disagree= 2
Neither Agree Nor Disagree= 3
Mostly Agree=4
Definitely Agree = 5

1. TV programs are an important source of information about fashion and "being attractive." _____ I
2. I've felt pressure from TV or magazines to lose weight._____ P
3. I do not care if my body looks like the body of people who are on TV._____ I-G
4. I compare my body to the bodies of people who are on TV. _____ I-G
5. TV commercials are an important source of information about fashion and "being attractive."_____ I
6. I do not feel pressure from TV or magazines to look pretty. _____ P
7. I would like my body to look like the models who appear in magazines._____ I-G
8. I compare my appearance to the appearance of TV and movie stars._____ I-G
9. Music videos on TV are not an important source of information about fashion and "being attractive." _____ I
10. I've felt pressure from TV and magazines to be thin. _____ P
11. I would like my body to look like the people who are in movies._____ I-G
12. I do not compare my body to the bodies of people who appear in magazines._____ I-G
13. Magazine articles are not an important source of information about fashion and "being attractive."_____ I
14. I've felt pressure from TV or magazines to have a perfect body._____ P
15. I wish I looked like the models in music videos._____ I-G
16. I compare my appearance to the appearance of people in magazines._____ I-G
17. Magazine advertisements are an important source of information about fashion and "being attractive." _____ I
18. I've felt pressure from TV or magazines to diet._____ P
19. I do not wish to look as athletic as the people in magazines. _____ I-A
20. I compare my body to that of people in "good shape."_____ I-A
21. Pictures in magazines are an important source of information about fashion and "being attractive." _____ I
22. I've felt pressure from TV or magazines to exercise._____ P
23. I wish I looked as athletic as sports stars._____ I-A
24. I compare my body to that of people who are athletic._____ I-A

Appendix H (continued)

25. Movies are an important source of information about fashion and "being attractive."_____ I
26. I've felt pressure from TV or magazines to change my appearance._____ P
27. I do not try to look like the people on TV._____ I-G
28. Movie starts are not an important source of information about fashion and "being attractive."_____ I
29. Famous people are an important source of information about fashion and "being attractive."_____ I
30. I try to look like sports athletes._____ I-A

I-A: Internalization Athlete

I-G: Internalization General

I: Information

P: Pressures

Appendix I

Body Shape Questionnaire

We would like to know how you have been feeling about your appearance over the *past four weeks.* Please read each question and circle the appropriate number to the right. Please answer *all* the questions.

Over the past four weeks:

	Never	Rarely	Some-times	Often	Very often	Always
1. Has feeling bored made you brood about your shape?	1	2	3	4	5	6
2. Have you been so worried about your shape that you have been feeling you ought to diet?	1	2	3	4	5	6
3. Have you thought that your thighs, hips, or bottom are too large for the rest of you?	1	2	3	4	5	6
4. Have you been afraid that you might become fat (or fatter)?	1	2	3	4	5	6
5. Have you worried about your flesh being not firm enough?	1	2	3	4	5	6
6. Has feeling full (e.g., after eating a large meal) made you feel fat?	1	2	3	4	5	6
7. Have you felt so bad about your shape that you have cried?	1	2	3	4	5	6
8. Have you avoided running because your flesh might wobble?	1	2	3	4	5	6
9. Has being with thin women made you feel self-conscious about your shape?	1	2	3	4	5	6
10. Have you worried about your thighs spreading out when sitting down?	1	2	3	4	5	6
11. Has eating even a small amount of food made you feel fat?	1	2	3	4	5	6

Appendix I (continued)

12. Have you noticed the shape of other women and felt that your own shape compared negatively?	1	2	3	4	5	6
13. Has thinking about your shape interfered with your ability to concentrate (e.g., while watching television, reading, listening to conversations)?	1	2	3	4	5	6
14. Has being naked, such as when taking a bath, made you feel fat?	1	2	3	4	5	6
15. Have you avoided wearing clothes which make you particularly aware of the shape of your body?	1	2	3	4	5	6
16. Have you imagined cutting off fleshy areas of your body?	1	2	3	4	5	6
17. Has eating sweets, cakes, or other high calorie food made you feel fat?	1	2	3	4	5	6
18. Have you not gone out to social occasions (e.g., parties) because you have felt bad about your shape?	1	2	3	4	5	6
19. Have you felt excessively large and rounded?	1	2	3	4	5	6
20. Have you felt ashamed of your body?	1	2	3	4	5	6
21. Has worry about your shape made you diet?	1	2	3	4	5	6
22. Have you felt happiest about your shape when your stomach has been empty (e.g., in the morning)?	1	2	3	4	5	6
23. Have you thought that you are in the shape you are because you lack self-control?	1	2	3	4	5	6
24. Have you worried about other people seeing rolls of fat around your waist or stomach?	1	2	3	4	5	6
25. Have you felt that it is not fair that other women are thinner than you?	1	2	3	4	5	6

Appendix I (continued)

26. Have you vomited in order to feel thinner?	1	2	3	4	5	6
27. When in company have you worried about taking up too much room (e.g., sitting on a sofa, or a bus seat)?	1	2	3	4	5	6
28. Have you worried about your flesh being dimply?	1	2	3	4	5	6
29. Has seeing your reflection (e.g., in a mirror or shop window) made you feel bad about your shape?	1	2	3	4	5	6
30. Have you pinched areas of your body to see how much fat there is?	1	2	3	4	5	6
31. Have you avoided situations where people would see your body (e.g., communal changing rooms or swimming pools)?	1	2	3	4	5	6
32. Have you taken laxatives in order to feel thinner?	1	2	3	4	5	6
33. Have you been particularly self-conscious about your shape when in the company of other people?	1	2	3	4	5	6
34. Has worry about your shape made you feel you ought to exercise?	1	2	3	4	5	6

Appendix J

Bulimia Test-Revised

Answer each question by circling the appropriate number. Please respond to each item as honestly as possibly; remember all of the information you provide will be kept strictly confidential.

1. I am satisfied with my eating patterns.
    1. agree
    2. neutral
    3. disagree a little
    4. disagree
    5. disagree strongly

2. Would you presently call yourself a "binge eater"?
    1. yes, absolutely
    2. yes
    3. yes, probably
    4. yes, possibly
    5. no, probably not

3. Do you feel you have control over the amount of food you consume?
    1. most or all of the time
    2. a lot of the time
    3. occasionally
    4. rarely
    5. never

4. I am satisfied with the shape and size of my body.
    1. frequently or always
    2. sometimes
    3. occasionally
    4. rarely
    5. seldom or never

5. When I feel that my eating behavior is out of control, I try to take rather extreme measures to get back on course (strict dieting, fasting, laxatives, diuretics, self-induced vomiting, or vigorous exercise).
    1. always
    2. almost always
    3. frequently
    4. sometimes
    5. never or my eating behavior is never out of control

Appendix J (continued)

6. I use laxatives or suppositories to help control my weight.
    1. once a day or more
    2. 3-6 times a week
    3. once or twice a week
    4. 2-3 times a month
    5. once a month or less (or never)

7. I am obsessed about the size and shape of my body.
    1. always
    2. almost always
    3. frequently
    4. sometimes
    5. seldom or never

8. There are times when I rapidly eat a very large amount of food.
    1. more than twice a week
    2. twice a week
    3. once a week
    4. 2-3 times a month
    5. once a month or less (or never)

9. How long have you been binge eating (eating uncontrollably to the point of stuffing yourself)?
    1. not applicable; I don't binge eat
    2. less than 3 months
    3. 3 months- 1 year
    4. 1-3 years
    5. 3 or more years

10. Most people I know would be amazed if they knew how much food I can consume at one sitting.
    1. without a doubt
    2. very probably
    3. probably
    4. possibly
    5. no

11. I exercise in order to burn calories.
    1. more than 2 hours per day
    2. about 2 hours per day
    3. more than 1 hour but less than 2 hours per day
    4. one hour or less per day
    5. I exercise but not to burn calories or I don't exercise

Appendix J (continued)

12. Compared with women your age, how preoccupied are you about your weight and shape?
    1. a great deal more than average
    2. much more than average
    3. more than average
    4. a little more than average
    5. average or less than average

13. I am afraid to eat anything for fear that I won't be able to stop.
    1. always
    2. almost always
    3. frequently
    4. sometimes
    5. seldom or never

14. I feel tormented by the idea that I am fat or might gain weight.
    1. always
    2. almost always
    3. frequently
    4. sometimes
    5. seldom or never

15. How often do you intentionally vomit after eating?
    1. 2 or more times a week
    2. once a week
    3. 2-3 times a month
    4. once a month
    5. less than once a month or never

16. I eat a lot of food when I'm not even hungry.
    1. very frequently
    2. frequently
    3. occasionally
    4. sometimes
    5. seldom or never

17. My eating patterns are different from the eating patterns of most people.
    1. always
    2. almost always
    3. frequently
    4. sometimes
    5. seldom or never

Appendix J (continued)

18. After I binge I turn to one of several strict methods to try to keep from gaining weight (vigorous exercise, strict dieting, fasting, self-induced vomiting, laxatives, or diuretics).
    1. never or I don't binge eat
    2. rarely
    3. occasionally
    4. a lot of the time
    5. most or all of the time

19. I have tried to lose weight by fasting or going on strict diets.
    1. not in the past year
    2. once in the past year
    3. 2-3 times in the past year
    4. 4-5 times in the past year
    5. more than 5 times in the past year

20. I exercise vigorously and for long periods of time in order to burn calories.
    1. average or less than average
    2. a little more than average
    3. more than average
    4. much more than average
    5. a great deal more than average

21. When engaged in an eating binge, I tend to eat foods that are high in carbohydrates (sweets and starches).
    1. always
    2. almost always
    3. frequently
    4. sometimes
    5. seldom, or I don't binge

22. Compared to most people, my ability to control my eating behavior seems to be:
    1. great than others' ability
    2. about the same
    3. less
    4. much less
    5. I have absolutely no control

23. I would presently label myself a "compulsive eater" (one who engages in episodes of uncontrolled eating).
    1. absolutely
    2. yes
    3. yes, probably
    4. yes, possibly
    5. no, probably not

Appendix J (continued)

24. I hate the way my body looks after I eat too much.
    1. seldom or never
    2. sometimes
    3. frequently
    4. almost always
    5. always

25. When I am trying to keep from gaining weight, I feel that I have to resort to vigorous exercise, strict dieting, fasting, self-induced vomiting, laxatives, or diuretics.
    1. never
    2. rarely
    3. occasionally
    4. a lot of the time
    5. most or all of the time

26. Do you believe that it is easier for you to vomit than it is for most people?
    1. yes, it's not problem at all for me
    2. yes, it's easier
    3. yes, it's a little easier
    4. about the same
    5. no, it's less easy

27. I use diuretics (water pills) to help control my weight.
    1. never
    2. seldom
    3. sometimes
    4. frequently
    5. very frequently

28. I feel that food controls my life.
    1. always
    2. almost always
    3. frequently
    4. sometimes
    5. seldom or never

29. I try to control my weight by eating little or no food for a day or longer.
    1. never
    2. seldom
    3. sometimes
    4. frequently
    5. very frequently

Appendix J (continued)

30. When consuming a large quantity of food, at what rate of speed do you usually eat?
    1. more rapidly than most people have ever eaten in their lives
    2. a lost more rapidly than most people
    3. a little more rapidly than most people
    4. about the same rate as most people
    5. more slowly than most people (or not applicable)

31. I use laxatives or suppositories to help control my weight.
    1. never
    2. seldom
    3. sometimes
    4. frequently
    5. very frequently

32. Right after I binge eat I feel:
    1. so fat and bloated I can't stand it
    2. extremely fat
    3. fat
    4. a little fat
    5. OK about how my body looks or I never binge eat

33. Compared to other people of my sex, my ability to always feel in control of how much I eat is:
    1. about the same or greater
    2. a little less
    3. less
    4. much less
    5. a great deal less

34. In the last 3 months, on the average how often did you binge eat (eat uncontrollably to the point of stuffing yourself)?
    1. once a month or less (or never)
    2. 2-3 times a month
    3. once a week
    4. twice a week
    5. more than twice a week

35. Most people I know would be surprised at how fat I look after I eat a lot of food.
    1. yes, definitely
    2. yes
    3. yes, probably
    4. yes, possibly
    5. no, probably not or I never eat a lot of food

Appendix J (continued)

36. I use diuretics (water pills) to help control my weight.
    1. 3 times a week or more
    2. once or twice a week
    3. 2-3 times a month
    4. once a month
    5. never

Appendix K

Eating Attitudes Test
(EAT-26)

INSTRUCTIONS:
Please place an (x) under the column which applies best to each of the numbered statements. All of the results will be strictly confidential. Most of the questions directly relate to food or eating, although other types of questions have been included. Please answer each question carefully. Thank you.

Always	Usually	Often	Sometimes	Rarely	Never	
□	□	□	□	□	□	1. Am terrified of being overweight.
□	□	□	□	□	□	2. Avoid eating when I am hungry.
□	□	□	□	□	□	3. Find myself preoccupied with food.
□	□	□	□	□	□	4. Have gone on eating binges where I felt I may not be able to stop.
□	□	□	□	□	□	5. Cut my food into small pieces.
□	□	□	□	□	□	6. Aware of the calorie content of foods that I eat.
□	□	□	□	□	□	7. Particularly avoid foods with a high carbohydrate content (e.g., bread, rice, potatoes).
□	□	□	□	□	□	8. Feel that others would prefer if I ate more.
□	□	□	□	□	□	9. Vomit after I have eaten.
□	□	□	□	□	□	10. Feel extremely guilty after eating.
□	□	□	□	□	□	11. Am preoccupied with a desire to be thinner.
□	□	□	□	□	□	12. Think about burning calories when I exercise.
□	□	□	□	□	□	13. Other people think that I am too thin.
□	□	□	□	□	□	14. Am preoccupied with the thought of having fat on my body.

Appendix K (continued)

Always	Usually	Often	Sometimes	Rarely	Never	
□	□	□	□	□	□	15. Take longer than others to eat my meals.
□	□	□	□	□	□	16. Avoid foods with sugar in them.
□	□	□	□	□	□	17. Eat diet foods.
□	□	□	□	□	□	18. Feel that food controls my life.
□	□	□	□	□	□	19. Display self-control around food.
□	□	□	□	□	□	20. Feel that others pressure me to eat.
□	□	□	□	□	□	21. Give too much time and thought to food.
□	□	□	□	□	□	22. Feel uncomfortable after eating sweets.
□	□	□	□	□	□	23. Engage in dieting behavior.
□	□	□	□	□	□	24. Like my stomach to be empty.
□	□	□	□	□	□	25. Enjoy trying rich new foods.
□	□	□	□	□	□	26. Have the impulse to vomit after meals.

Appendix L

ADAPTED FAMILY AND FRIENDS SCALE

The following items include statements about family members and friends. If you do not have one of the family members mentioned, you may skip those items and go onto the next one. Please rate the degree to which you agree with each statement using the following scale:

0 1 2 3 4

NA Strongly Agree Agree Disagree Strongly Disagree

Mother

1. My mother encourages me to lose weight or to keep from gaining weight. ____
2. My mother encourages me to diet to control my weight or look better. ____
3. My mother encourages me to be concerned with my appearance in general. ____
4. My mother diets to lose weight or to keep from gaining weight. ____
5. My mother is concerned with her appearance. ____

Father

6. My father encourages me to lose weight or to keep from gaining weight. ____
7. My father encourages me to diet to control my weight or look better. ____
8. My father encourages me to be concerned with my appearance in general. ____
9. My father diets to lose weight or to keep from gaining weight. ____
10. My father is concerned with his appearance. ____

Siblings

11. My siblings (brothers or sisters) encourage me to lose weight or to keep from gaining weight. ____
12. My siblings encourage me to diet to control my weight or look better. ____
13. My siblings encourage me to be concerned with my appearance in general. ____
14. My siblings diet to lose weight or to keep from gaining weight. ____
15. My siblings are concerned with their appearance. ____

Appendix L (cont'd)

0	1	2	3	4
NA	Strongly Agree	Agree	Disagree	Strongly Disagree

Friends

16. My friends encourage me to lose weight or to keep from gaining weight. ____
17. My friends encourage me to diet to control my weight or look better. ____
18. My friends encourage me to be concerned with my appearance in general. ____
19. My friends diet to lose weight or to keep from gaining weight. ____
20. My friends are concerned with their appearance. ____

Appendix M

Perception of Teasing Scale

We are interested in whether you have been teased and how this affected you.

First, for each question rate *how often* you think you were teased using the scale provided, *never* (1) to *always* (5).

Never		Sometimes		Very Often
1	2	3	4	5

Second, unless you respond *never* to the question, rate *how upset* you were by the teasing, *not upset* (1) to *very upset* (5).

Not Upset		Somewhat Upset		Very Upset
1	2	3	4	5

1. People made fun of you because you were heavy.	1	2	3	4	5
How upset were you?	1	2	3	4	5
2. People made jokes about you being heavy.	1	2	3	4	5
How upset were you?	1	2	3	4	5
3. People laughed at you for trying out for sports.	1	2	3	4	5
How upset were you?	1	2	3	4	5
4. People called you names like “fatso”.	1	2	3	4	5
How upset were you?	1	2	3	4	5
5. People pointed at you because you were overweight.	1	2	3	4	5
How upset were you?	1	2	3	4	5
6. People snickered about your heaviness when you walked into a room alone.	1	2	3	4	5
How upset were you?	1	2	3	4	5
7. People made fun of you by repeating something you said because they thought that it was dumb.	1	2	3	4	5
How upset were you?	1	2	3	4	5
8. People made fun of you because you were afraid to do something.	1	2	3	4	5
How upset were you?	1	2	3	4	5
9. People said you acted dumb.	1	2	3	4	5
How upset were you?	1	2	3	4	5
10. People laughed at you because you didn’t understand something.	1	2	3	4	5
How upset were you?	1	2	3	4	5
11. People teased you because you didn’t get a joke.	1	2	3	4	5
How upset were you?	1	2	3	4	5

Appendix N

CONSENT TO PARTICIPATE IN RESEARCH

You are invited to participate in a research study conducted by Loren Gianini, M.S., from the Psychology Department at the University of New Mexico. This study is being conducted for the completion of Loren Gianini's dissertation.You were identified as a possible volunteer in the study because of your age, gender, and your fluency in English.

PURPOSE OF THE STUDY: The purpose of the current study is to examine social influences on how people think about their bodies.

PROCEDURES AND ACTIVITIES You will be asked to complete nine questionnaires. One questionnaire will ask about basic demographic information. As a part of this demographic information collection, you will be weighed. Two of the questionnaires will ask about how you think about your body. One questionnaire will ask about how your family and friends may have talked to you about weight and shape, and one questionnaire will ask you about your experiences being teased. Another questionnaire will ask about how you think about society's beauty ideals. Three questionnaires will ask you about your body image and eating behaviors. These nine questionnaires should take approximately one hour total to complete. You will not receive payment for this study. You will receive one research credit for your participation.

POTENTIAL RISKS AND DISCOMFORTS It is possible that you may experience some boredom, distress or discomfort while filling out the questionnaires. If you are feeling upset, please feel free to contact Loren Gianini, the experimenter, at lgianini@unm.edu, or Dr. Jane Ellen Smith, a psychology professor, clinician and faculty advisor for this experiment, at 277-2650, or Dr. Dan Matthews, the director of the UNM psychology clinic, at 277-5164, or page him at 951-1617, to discuss how you are feeling. You can receive medical or psychological attention at the Student Health Center (Building 73) at the University of New Mexico, by calling 505-277-3136, or as a walk-in.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY There is no benefit to you for your participation. We hope that the results of this study will give us helpful information about how people think about themselves and their bodies.

CONFIDENTIALITY Any information obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Your questionnaires and data will be labeled using a number and not your name. This information will be stored in a locked office at the University of New Mexico. The questionnaires will be stored separately from your consent form and there will be no way to link your consent form with your questionnaires. Identifying information will not be given in any paper that may be written as a result of this study. Your data will be destroyed during the Spring semester 2014.

Appendix N (continued)

PARTICIPATION AND WITHDRAWAL You can choose whether to participate in this study or not. If you volunteer to participate, you may withdraw at any time without penalty or loss of benefits to which you might otherwise be entitled. You may also refuse to answer any questions you do not want to answer and still remain in the study. By signing this consent form, you are not waiving any legal claims, rights or remedies because of your participation in this research study.

IDENTIFICATION OF INVESTIGATORS AND REVIEW BOARD If you have any questions or concerns about the research, please feel free to contact: If you have any questions or concerns about the research, please feel free to contact: Loren Gianini at lgianini@unm.edu or Dr. Jane Ellen Smith at the University of New Mexico, Department of Psychology, Logan Hall, 1 University of New Mexico, Room 116, Albuquerque, NM 87131, (505) 277-2650. If you have other concerns or complaints, contact the Institutional Review Board at the University of New Mexico, 1717 Roma NE, Room 205, Albuquerque, NM 87131, (505) 277-2257, or toll free at 1-866-844-9018.

SIGNATURE OF RESEARCH PARTICIPANT

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been provided a copy of this form.

_____

Name of Participant (please print)

_____ _____

Signature of Participant Date

SIGNATURE OF INVESTIGATOR

In my judgment the participant is voluntarily and knowingly providing informed consent and possesses the legal capacity to give informed consent to participate in this research study

_____

Name of Investigator or Designee

_____ _____

Signature of Investigator or Designee Date

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