

THE EFFECTS OF OBJECTIFICATION AND SELF-ESTEEM ON BODY SHAME,
APPEARANCE-CONTINGENT SELF-WORTH AND RESTRAINED EATING

by

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A thesis

Presented to the faculty of

Towson University

in partial fulfillment

of the requirements for the degree

Master of Arts

Department of Psychology

Towson University

Towson, Maryland, 21252

May, 2013

TOWSON UNIVERSITY
OFFICE OF GRADUATE STUDIES

THESIS APPROVAL PAGE

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ACKNOWLEDGEMENTS

I am exceedingly grateful for the advice and encouragement I have received from my advisor, Dr. Buckingham. With both his insight and thoughtful guidance, I have honed invaluable research skills and experiences important to my development as a psychology researcher. I would also like to thank my thesis committee members, Dr. Munro and Dr. Govern, for their direction and support throughout the preparation of my thesis project.

ABSTRACT

THE EFFECTS OF OBJECTIFICATION AND SELF-ESTEEM ON BODY SHAME, APPEARANCE-CONTINGENT SELF-WORTH AND RESTRAINED EATING

Allie Sypher

Using objectification theory (Fredrickson and Roberts ,1997), this study examined the moderating influence of trait self-esteem and the mediating influence of appearance-contingent self-worth on interrelationships among self-objectification, body shame, and disordered eating. Female participants first completed a trait self-esteem measure. Self-objectification was then manipulated through the recording of physical body measurements (e.g. weight, waist circumference). Among various distractor questionnaires, participants then completed measures of state self-objectification, body shame, and appearance-contingent self-worth. Disordered eating was finally observed using a purported taste test. A series of multiple regression analyses were used to examine the effect of objectification, trait self-esteem, and the Objectification X Trait Self-Esteem interaction on appearance-contingent self-worth, body shame and restrained eating, respectively. Individuals with higher trait self-esteem reported lower state self-objectification, appearance-contingent self-worth and body shame. Participants in the

objectification condition consumed significantly less food than participants in the control condition and, thus, demonstrated significantly more restrained eating behavior.

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I. INTRODUCTION

“Big breasts, big ass, big deal. A sex symbol becomes a thing. I hate being a thing,” quipped Marilyn Monroe following an interview question pertaining to her supposed sex symbol status (Monroe, 1962, August 3). Regardless of how much Monroe actually appreciated the attention she received as a sex symbol, her response illustrates Western society’s pervasive societal tendency to perceive women as mere objects. In an effort to better understand such instances in which society reduces women to objects, Fredrickson and Roberts (1997) proposed objectification theory. Objectification theory rests on the notion that Western society gradually evolved to perceive women’s physical bodies as distinct from their personal identities and eventually came to treat women’s bodies as objects to be evaluated by others. The theory also posits that as women became treated as objects to be controlled and evaluated by others, (i.e., sexual objectification), they also were socialized to adopt a third-party perspective of their own physical bodies (i.e., self-objectification). Not only does objectification theory explicate the process through which women have been socialized to view themselves and other women as objects, but it also acts as a framework for understanding negative experiential consequences and mental health disorders that disproportionately affect women. For instance, although some have found that self-objectification is positively correlated with the negative experiential consequence of body shame (Augustus-Hovath & Tykla, 2009; Kozee et al., 2007; Kozee & Tykla, 2006; McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Quinn, Kallen & Cathey, 2006; Tiggemann & Slater, 2001; Tykla & Hill), others

have demonstrated that it is also closely linked to behaviors symptomatic of eating disturbances (i.e., disordered eating behavior and eating disorders; Fredrickson, Roberts, Noll, Quinn & Twenge, 1998; Harrison & Fredrickson, 2003; McKinley, 1998; Miner-Rubino, Twenge, Fredrickson, 1998), both of which disproportionately affect women. Indeed, several studies support the notion that self-objectification seems to coincide with a variety of both negative experiential and mental health consequences (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; McFarlane, Polivy, Herman, 1998).

Critics of objectification theory sometimes point out that if both sexual and self-objectification are as pervasive as Fredrickson and Roberts (1997) propose, then resultant negative experiential and mental health risks should be equally as pervasive. Evidence, however, suggests that trait self-esteem may be able to account for individual differences in the development of such negative experiential and mental health risks. For instance, researchers have found that compared to high self-esteem individuals (HSE), low self-esteem (LSE) individuals are more likely to internalize societal images of thinness (Strigel-Moore & Cachelin, 1999), engage in body surveillance (Moradi et al., 2005), look to societal ideals to determine their goals, and experience increased body shame (Tylka & Subich, 2004). On the other hand, HSE individuals generally tend to be less focused on, and more satisfied with, their appearance (Cook-Cattone & Phelps, 2003; Fingeret & Gelaves, 2004). Moreover, it seems plausible that individual differences in the development of negative experiential and mental health consequences in response to sexual and self-objectification can be accounted for by differences in trait self-esteem

level. Thus, the purpose of the present study was to examine trait self-esteem as a moderator, and appearance-contingent self-worth as a mediator, of the effect of self-objectification on body shame and disordered eating. Furthermore, in the next section, I provided a more detailed review of objectification theory, followed by a description of two related negative consequences of this process: body shame and disordered eating. I then discussed trait self-esteem as a potential moderator of the effect of self-objectification on body shame and disordered eating, and appearance-contingent self-worth as a potential mediator, of this relationship. Finally, I discussed the present study.

II. LITERATURE REVIEW

Objectification Theory

Fredrickson and Roberts (1997) define sexual objectification as the composition of three distinct evaluation processes: the process of separating physical bodies, body parts, or specific bodily functions from one's "actual person", the process of reducing physical bodies, body parts, or specific bodily functions to the status of mere instruments, and the process of altering perception to include the idea that bodies, body parts, or specific bodily functions are capable of representing one's "actual person" (p. 175). Although sexual objectification is characterized by acts ranging from mild verbal communication to severe sexual violence, Fredrickson and Roberts (1997) focus on milder forms such as visual inspection, or "sexualized gazing", which the authors describe as unsolicited visual examination of a female's physical appearance in a sexual manner (Fredrickson & Roberts, 1997, p.175). Although visual inspection commonly occurs within face-to-face interpersonal arenas, the advent of visual media has allowed the act to occur by proxy through the adoption of third-party (i.e., the witnessing of the adoption of a sexually objectifying gaze of another) or first-party (i.e., the adoption of a sexually objectifying gaze) perspective of sexual objectification. For example, sexual objectification from a third-party perspective is most often imposed on television viewers in the form of advertisements that depict male actors ogling third-party female actresses; in contrast, sexual objectification from a first-party perspective often occurs in pornographic magazines and videos that "seamlessly align viewers with an implicit

sexualizing gaze”, such that the camera solely focuses on suggestively posed female bodies or body parts to the exclusion of other visual objects (Fredrickson & Roberts, 1997, p. 176). Furthermore, Fredrickson and Roberts (1997) argue that because such visual inspection is so deeply integrated into widespread visual media, viewers of both genders are constantly exposed to the objectification of women and, subsequently, are influenced to view women in a sexually objectified manner. Although some (e.g., Buss, 1989) have suggested that sexual objectification has an evolutionary origin related to the evaluation of women’s reproductive fitness based on physical attractiveness, objectification theory is solely focused on understanding the resultant negative experiential and psychological consequences.

Furthermore, Fredrickson and Roberts (1997) theorize that the most immediate and profound effect of sexual objectification is self-objectification. Self-objectification is described as the subconscious socialization process in which women adopt third-party self-views and assume the role of objects. This process is most often characterized by a compulsive preoccupation with physical attractiveness in which thoughts and behaviors are centered more on how the body appears and less on how the body feels (McKinley & Hyde, 1996). Although both sexual and self-objectification processes initially seem neither appealing, nor in women’s best interest, Fredrickson and Roberts (1997) suggest that women are socialized to believe that both are strongly associated with benefits of physical attractiveness. Specifically, the authors propose that women engage in self-objectification because they believe it will increase the likelihood of being deemed

physically attractive and, in turn, will help them gain control over potential economic and social benefits that appear to result from the attainment of physical attractiveness. Indeed, several studies have demonstrated that physical attractiveness is associated with benefits in many arenas, ranging from positive personality ratings and favorable judicial verdicts to successful arguments and increased salaries (Swami & Furnham, 2008; Graham & Perry, 1976). Moreover, because physical attractiveness determines both social and economic success, women may view self-objectification as a candid assessment of the likelihood of reaping the benefits associated with the attainment of an attractive physical appearance.

Although self-objectification may improve physical attractiveness and increase the likelihood of attaining several economic and social benefits, women are often unaware that such self-objectifying behavior ultimately leaves them powerless. As a result, women not only place more emphasis on the value of physical attractiveness, but also internalize a third-party perspective of their physical selves that is similar to Cooley's "looking-glass self" (Fredrickson & Roberts, 1997). Furthermore, the authors suggest that women assume that adoption of such third-party perspective aids in the prediction of others' perception of their physical appearance, and, in turn, believe that it facilitates anticipation of potential social and economic rewards; however, they also suggest that it negatively impacts quality of life. Particularly, Fredrickson and Roberts (1997) suggest that self-objectification most often results in habitual body-monitoring which is characterized by increased interest in others' perception of one's own body for

the purpose of predicting others' behavior based on physical appearance. Furthermore, such heightened interest in others' perception of physical appearance is actually quite harmful because such attention is chronically directed toward the self and personal "flow of consciousness" is constantly disrupted (Fredrickson & Roberts, 1997, p. 180).

Moreover, Fredrickson and Roberts (1997) argue it is such combination of increased attention toward the self, paired with increased attention toward the outer "social self", that increases vulnerability to specific negative experiential (e.g., shame, anxiety, lack of peak motivational states, and lack of bodily state awareness) and mental health (e.g., depression, eating disorders, and sexual dysfunction) consequences.

Consequences of Objectification: Body Shame and Disordered Eating

According to objectification theory, the most likely consequence of being reduced to the status of an object is the negative experiential consequence of shame. Traditionally, shame is defined as a negative emotion that results from the conclusion that one falls short compared to some ideal (Darwin, 1872; Fredrickson & Roberts, 1997; Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). In more recent years, however, research related to objectification theory has focused specifically on body shame which, like shame, is described as the negative emotion that results from the conclusion that the appearance of one's physical body does not measure up to unrealistic body image ideals propagated by Western media. Unfortunately, body shame is much more common than is usually expected because the pervasive nature of sexual objectification socializes women to strive for rewards associated with physical attractiveness, yet also imposes unrealistic

attractiveness ideals which make such rewards nearly impossible to attain. Furthermore, just as shame is associated with incompliance to a greater moral obligation, body shame is also said to have a moral component and is, thus, marked by a general sense of anxiety and an intense urge to avoid social exposure of perceived physical flaws (Noll & Fredrickson, 1998).

As mentioned, objectification theory proposes that sexual and self-objectification results in negative experiential consequences which, in turn, result in negative mental health outcomes. As such, the authors propose that the negative experiential consequence of body shame greatly increases susceptibility to the development of the mental health consequence, disordered eating. Distinct from clinical eating disorders which are characterized by exceptionally unhealthy food consumption patterns and accompanied by additional psychological symptoms that warrant medical attention and clinical diagnosis (i.e., anorexia nervosa, bulimia nervosa, and binge eating disorder), disordered eating is characterized by unhealthy and abnormal food consumption patterns that usually result from chronic dieting or other weight loss behaviors (Bryla, 2003). Some unusual eating behaviors that are typically considered “disordered” include: food consumption in the absence of hunger, absence of food consumption in the presence of hunger, avoidance of consumption of certain meals, restriction of consumption to certain food categories, and the experience of guilt or shame during or following consumption of food (Bryla, 2003). While disordered eating behaviors are often considered to be much less aberrant than those exhibited in clinical eating disorders, it is important to note that such behavior

carries serious consequences. For instance, some have demonstrated that adolescent females under the age of 15 who exhibit behaviors consistent with disordered eating behavior are eight times more likely develop a clinical eating disorder compared to non-disordered eating counterparts (Bryla, 2003; Neumark-Sztainer, Hannan, 2000).

Fredrickson and Roberts (1997) use feminist theory to explain how the sexual objectification of women causes the negative experiential consequence of body shame and, in turn, prompts the development of disordered eating behavior. Specifically, the authors explain that disordered eating is both a realistic and probable response to simultaneous exposure to both sexual objectification and unrealistic attractiveness ideals. From this perspective, sexual objectification regularly conditions women to engage in the act of self-objectification which, when paired with unrealistic attractiveness ideals, results in the experience of body shame. Consequently, as women experience the unpleasant thoughts of immorality and fears of social disapproval that accompany body shame, they become highly motivated to decrease such aversive feelings through seemingly harmless weight-loss behaviors such as dieting and restrained eating. Such weight-loss behavior often coincides with disordered eating and some studies (e.g., McCarthy, 1990; Sliberstein et al., 1987) have even demonstrated that such behavior is associated with both a heightened sense of control over food and positive feelings of thinness which have been suggested to condition disordered eating behavior and encourage behaviors associated with clinical eating disorders. Thus, objectification theory suggests that society's imposition of unrealistic attractiveness ideals may lead to a sense of normative

discontent among women which, over time, may cause some to perceive disordered eating behavior as a reasonable method of minimizing the discrepancy between actual physical appearance and unrealistic attractiveness ideals.

Within the larger context of objectification theory, Fredrickson and Roberts (1997) also propose that there may be a more direct relationship between both sexual and self-objectification, the negative experiential consequence of body shame, and increased risk for disordered eating behavior. Furthermore, many studies have provided evidence to support this proposition. Fredrickson, Noll, Roberts, Quinn and Twenge (1998), for instance, first examined this relationship and predicted that self-objectification would result in body shame which would, in turn, result in disordered eating behavior. Self-objectification was manipulated by having participants try on either a swimsuit (self-objectification condition) or a sweater (control condition) before measuring body shame with a self-report measure and disordered eating behavior with a purported taste test. The results provided support for objectification theory as participants in the objectification condition reported higher self-objectification, body shame, and disordered eating compared to the control condition. In addition, the authors also found that women were more likely to engage in self-objectification than men. Thus, the authors concluded that self-objectification occurs more often among women and has a direct relationship with both body shame and disordered eating behavior.

Noll and Fredrickson (1998) were also interested in the effect of self-objectification on body shame and disordered eating. In addition, the authors were also

the first to examine the variables within a mediational model which they used to predict that body shame would partially mediate the relationship between self-objectification and disordered eating behavior. Based on Fredrickson et al.'s (1998) results, the study was restricted to female adolescents who were given self-report measures of self-objectification, body shame, anorexic and bulimic symptoms, as well as disordered eating. The authors found support for their proposed model in that they found self-objectification to result in body shame which, in turn, resulted in disordered eating; however, the authors suggested that others should follow Fredrickson et al.'s (1998) lead and offer additional empirical support for this relationship because the correlational nature of their results was unable to establish a causal order between self-objectification, body shame, and disordered eating variables. Additionally, the authors also suggested that future research should identify whether the apparent relationship between self-objectification, body shame, and disordered eating is evident among other diverse subgroups.

Following Noll and Fredrickson's (1998) suggestion, Tiggemann and Slater (2001) compared trait self-objectification among ballet dancers, a subgroup of women often thought to experience self-objectification (e.g., they practice in front of mirrors, wear tight-fitting clothing, etc.), to trait self-objectification among college students who never participated in ballet. The authors conceptualized self-objectification as a relatively enduring trait and, as a result, predicted that former ballet dancers would report higher levels of trait self-objectification, body shame, and disordered eating than non-dancers. In

addition, Tiggemann and Slater (2001) also wanted to provide empirical support for other unexamined aspects of Fredrickson and Roberts' (1997) objectification theory and, thus, predicted that reports of higher self-objectification, body shame, and disordered eating would coincide with higher levels of appearance anxiety and internal awareness.

As expected, Tiggemann and Slater (2001) found that ballet dancers reported higher levels of both self-objectification and disordered eating compared to non-ballet dancers. Consistent with Noll and Fredrickson's (1998) results, the authors also found that the relationship between self-objectification and disordered eating was mediated by body shame. Although their study provided additional empirical support for the relationship between self-objectification, body shame, and disordered eating, Tiggemann and Slater (2001) conducted an additional study to investigate whether their model would hold true among a "current at-risk group" (i.e., female adolescents who presently engage in ballet) compared to non-dancers. Furthermore, Slater and Tiggemann (2002) predicted that compared to non-dancers, the current at-risk group would report even higher self-objectification, body shame, and disordered eating compared to the previously examined former ballet dancers. Although results from this additional study demonstrated a significant relationship between self-objectification, body shame, and disordered eating and, thus, provided additional support for objectification theory, Slater and Tiggemann (2002) found that adolescent ballet dancers did not report higher self-objectification, body shame, and disordered eating compared to non-dancers. The authors suggested that this finding may be related to the fact that adolescents report the highest levels of these

measures which could have translated to higher self-objectification scores among all adolescents in the study. Furthermore, Tiggemann and Slater (2002) concluded that results from both studies support other prior research demonstrating a link between self-objectification, body shame, and disordered eating.

Although results from both Noll and Fredrickson (1998) and Tiggemann and Slater (2001; 2002) provide initial support for the relationship between self-objectification, body shame, and disordered eating, many subsequent studies have also investigated and expanded upon this area of research. In more recent years, Tylka and Hill (2004), Morardi, Dirks, Matteson (2005), and Muehlenkamp and Saris-Baglana (2002) all used path analyses to examine the interrelationships proposed by objectification theory. Tylka and Hill's (2004) study provides evidence that pressure to be thin predicts both body surveillance and body shame; in addition, the authors also found that body shame predicts disordered eating and poor awareness of internal states. Similarly, Morardi, Dirks, and Matteson's (2005) study also provides evidence that internalization of sociocultural standards mediates the link between sexual objectification and self-objectification, body shame, and disordered eating. In the same way, Muehlenkamp and Saris-Baglana (2002) also found results which support a model linking self-objectification, restricted eating, bulimic symptoms, and depression. Furthermore, other studies have since examined the relationship between self-objectification, body shame, and disordered eating and have generalized the model to several different populations, including older women (Augustus-Horvath & Tylka, 2009;

Tiggemann & Lynch, 2001), adult women with diagnosable eating disorders (Calgero et al., 2009), and lesbian women (Kozee & Tylka, 2006).

Appearance-Contingent Self-Worth and Trait Self-Esteem

Given that objectification theory (Fredrickson & Roberts, 1997) not only identifies physical appearance as a critical source of women's self-worth at the expense of other aspects of the self (e.g., personality, attitudes, feelings; Fredrickson & Roberts, 1997), but also proposes that the experience of objectification results in various negative experiential and psychological consequences, it seems reasonable to both categorize this experience as a form of self-threat (i.e., an experience that challenges or endangers favorable self-views; Baumeister & Jones, 1978) and to also expect that it would prompt self-enhancing behavior as a method of avoiding such negative experiential and psychological consequences. Given that the self-threatening experience of objectification is uniquely tied to physical appearance, it seems plausible that some women would self-enhance in response to such an experience through decreasing the extent to which their self-worth is based on physical appearance. Furthermore, in the present section, I will discuss appearance-contingent self-worth, the extent to which self-worth is based on physical appearance, as a potential mediator of the effect of objectification on body shame and disordered eating. It is important to note, however, that trait self-esteem, the relatively stable judgment of worth related to the entire self that is fundamental to mental health and social behavior (Baumeister et al., 2003; Leary et al., 1995; Mercurio & Laundry, 2003), has been demonstrated to influence the ability to engage in self-

enhancement behavior following self-threats (e.g., Dodgson & Wood, 1996; Thøgersen-Ntoumani et al., 2011). Specifically, because high trait self-esteem (HSE) individuals tend to be better at self-enhancing and, thus, may be better able to decrease level of appearance-contingent self-worth following an objectifying self-threat, I will also discuss trait self-esteem as a potential moderator of the effect of objectification on appearance-contingent self-worth, and subsequent feelings of body shame and disordered eating behavior.

Assuming that the objectification process is inherently unpleasant and that maintaining positive self-views is inherently desirable, it seems plausible that the experience of objectification, like threats to the self in general, would elicit self-enhancing behavior. Self-enhancement theory posits that an intense desire to maintain positive self-views motivates the interpretation of information in such a way that sacrifices its accuracy to ensure attainment of positive self-regard (Hoyle, Kernis, Leary, & Baldwin, 1999; Baumeister, 1995; Swann, Hickson, Stein-Seroussi, & Gilbert, 1990; Taylor and Brown, 1998) and because positive self-regard is associated with maintenance of goal achievement and interpersonal behaviors, most people are likely to engage in self-enhancement to minimize the negative impact of self-threats (Campbell & Sedikies, 1999; McFarlin, Baumeister & Blascovich, 1984; Leary, Tambor, Terdal & Downs, 1995; Park, Crocker, & Keifer, 2007). Indeed, some have demonstrated that self-threat elicits behaviors that promote positive feelings toward the self (Campbell & Sedikies, 1999; McFarlin, Baumeister & Blascovich, 1984; Leary, Tambor, Terdal & Downs,

1995). For instance, some have found that following negative feedback, people are likely to modify the content of both negative cognitions toward the self (Brown & Mankowski, 1993; Brown & Taylor, 1986) and the content of negative self-related information to reduce psychological discomfort and maintain favorable cognitions about the self (Steele, 1988; Tesser, 1988). Furthermore, others have found that self-threat increases self-enhancement behaviors such as the derogation of stereotyped others (Fein & Spencer, 1997) and increased positive self-presentations, (Schneider & Turkat, 1975), to unwarranted social acceptance (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997) and increased intelligence ratings (Beauregard & Dunning, 1998). Therefore, it seems reasonable to characterize the experience of objectification as capable of threatening positive self-regard and, therefore, capable of eliciting self-enhancement behavior among most women.

One method of self-enhancement in which women likely engage following an objectifying experience involves modifying the extent to which self-worth is based on physical appearance. Building upon James' (1890) conceptualization of self-worth as a multifaceted and hierarchical construct, the Contingencies of Self-Worth model of self-esteem (Crocker & Wolfe, 2001) contends that trait self-esteem is dependent upon a unique combination of seven domains that are deemed personal and unique sources of self-worth: approval, appearance, God's love, family support, school competency, competition, and virtue. Specifically, the model proposes that self-worth is a product of an interrelationship between state and trait contingencies of self-worth and state and trait

self-esteem, such that temporary successes and failures in contingent domains particularly impact state self-esteem. The model proposes that successes and failures in contingent domains have motivational and behavioral consequences that ultimately impact trait self-esteem: positive experiences in contingent domains bolster self-esteem and prompt respective goal-maintenance behavior, whereas negative experiences in such domains threaten state self-esteem and prompt failure-avoidance behavior. Importantly, Crocker and Wolfe (2001) also point out that each of the self-worth contingent domains fall on a continuum ranging from internally-based (e.g., virtue or God's love), which require little or no validation from others, to externally-based (e.g., academic competence, physical appearance), which almost completely rely on validation from external sources (Sanchez & Crocker, 2005).

Most studies using Crocker and Wolfe's (2001) Contingencies of Self-Worth model have treated the contingent domains as preexisting individual difference variables and, until recently, few have examined the possibility that they possess "state-like" properties potentially influenced by experimental manipulations and modified as a form of self-enhancement behavior (Buckingham, Weber & Sypher, 2012). Recently, however, Strahan et al. (2008) examined the effect of situational exposure to appearance-related threats on appearance-contingent self-worth and reported that, compared to a control group that viewed neutral commercials, female participants who viewed television commercials containing appearance-threats (i.e., attractive female swimsuit models) demonstrated increased appearance-contingent self-worth. Although this study

provides evidence that contingencies of self-worth may indeed have state-like properties, it also suggests that instead of decreasing appearance-contingent self-worth (i.e., engaging in self-enhancing behavior) following appearance-related self-threats, women may actually further harm themselves by increasing the extent to which their self-worth is contingent upon physical appearance. Furthermore, based upon such results, it would seem reasonable to expect that the experience of objectification would initially trigger an ego-motivational state in which women become preoccupied with validating their physical appearance and, in turn, increase their appearance-contingent self-worth. The idea that self-objectification prompts an ego-motivational state is consistent with Breines, Crocker, and Garcia's (2008) finding that under heightened self-objectifying circumstances, female participants also reported both higher appearance-related ego-involvement and appearance-related validation goals and diminished well-being. Thus, consistent with Crocker and Wolfe's (2001) proposition that failure in a contingent-domain elicits increased effort to improve subsequent success in such domains, it seems plausible that situational objectification, which threatens women through exposure to unrealistic, third-party views of the physical self, would initially prompt women to become more invested in their physical appearance and, thus, immediately increase their appearance-contingent self-worth. Because increasing appearance-contingent self-worth would seem to further threaten women's appearance-related self-image, however, it seems likely that, at least some, individuals would subsequently attempt to salvage their self-worth by engaging in self-enhancing behavior. Furthermore, I predict that as this

state of preoccupation with physical appearance is met with the realization that it is impractical to strive for the unrealistic physical attractiveness ideals perpetuated by Western society, some women will ultimately attempt to reduce the extent to which they place their self-worth on physical appearance to avoid the experience of body shame and disordered eating behavior.

The notion that some women may be better able than others to self-enhance by reducing appearance-contingent self-worth following an appearance-threat is consistent with existing trait self-esteem literature (e.g., Dodgson & Wood, 1996; Thøgersen-Ntoumani et al., 2011; Buckingham, Weber & Sypher, 2012) which provides evidence that ability to self-enhance following a self-threat varies as a function of trait self-esteem level: compared to lower trait self-esteem (LSE) individuals, those with higher trait self-esteem (HSE) are more likely to engage in behaviors that maximize achievement of positive self-regard. For instance, some have found that HSE individuals are more likely to enhance self-esteem following a self-threat by making downward social comparisons (Schutz & Tice, 1997), seeking competency-related feedback, simultaneously increasing self-ratings of intelligence while decreasing others' intelligence ratings (Beauregard & Dunning, 1998), maintaining more positive affect and cognition (Dodgson & Wood; 1998), and becoming more independent (Vohs & Heatherton, 2001); in contrast, LSE individuals have been found to endanger self-esteem by making upward social comparisons (Schutz & Tice, 1997), seeking competency-related feedback, maintaining less positive affect and cognition (Dodgson & Wood, 1998), denigrating sources of

positive feedback (Beauregard & Dunning, 1998), and becoming more interdependent (Vohs & Heatherton, 2001).

Important to the present study, this pattern of trait self-esteem differences in ability to self-enhance has been demonstrated within the context of appearance-related threats. Jones and Buckingham (2005), for example, reported that trait self-esteem influences the effect of social comparisons of attractiveness on women's body image. After exposure to: an attractive female photograph, an unattractive female photograph, or no exposure (i.e., control condition), participants then completed measures of affect, internalization of sociocultural norms, and contingent of self-worth. Consistent with the notion that trait self-esteem level may influence ability to self-enhance following a self-threat, among those exposed to the attractive female photograph (i.e., appearance threat), only LSE individuals' body esteem was negatively impacted; the body esteem of HSE individuals in the same group was actually positively affected by engaging in upward social comparison to an appearance threat. Jones and Buckingham (2005) explain that this difference in self-enhancement ability may account for such body image differences among the two groups, such that HSE individuals may already feel confident in their physical appearance and ability to identify with attractive others whom they perceive to be in their peer group (i.e., an assimilation effect); as such, these individuals may not engage in explicit social comparison in the presence of potential appearance threats and, thus, may inadvertently spare their body image. In contrast, LSE individuals may perceive themselves as less physically attractive and subsequently categorize such

attractive individuals into an out-group (i.e., a contrast effect); as such, these individuals likely engage in social comparison processes and, thus, threaten existing body image. Moreover, the results from this study seem to provide evidence that level of trait self-esteem may predict ability to self-enhance via identification with appearance-threatening peers and, furthermore, may influence the extent to which threats to appearance are able to impact women's body image.

Similarly, Park and Maner (2009) also focused on how trait self-esteem influences self-enhancement ability following appearance-related threats. After exposure to a variety of appearance-related self-threats (e.g., negative physical appearance-related feedback; reflection upon favorite physical attribute) female participants were instructed to complete measures of trait self-esteem, contingent self-worth, desire for peer social affiliation, and desire for appearance-improvement behaviors. Although exposure to appearance-threatening conditions prompted self-enhancing behaviors among both groups, the authors found that trait self-esteem impacted the type of self-enhancement technique chosen. Specifically, the authors found that HSE individuals were more likely to desire social contact following appearance-threats, whereas LSE individuals were likely to engage in appearance-enhancing behaviors and avoid social contact. Furthermore, the results of this study are consistent with Jones and Buckingham's (2005) report that level of trait self-esteem is critical to the ability to self-enhance following self-threats; however, while Jones and Buckingham (2005) highlight the importance of trait self-esteem in the perception of appearance-threats and subsequent self-enhancing

behavior, Park and Maner (2009) move beyond threat-perception and focus on the specific behaviors that are involved in self-enhancing following appearance threats. Interestingly, however, both studies demonstrate the tendency for HSE individuals to depend on social interaction as a method of self-enhancement and the tendency for LSE individuals to independently self-protect (e.g., distancing the self from others, engaging in appearance-improvement tactics) as a method of self-enhancement.

Although the aforementioned studies provide evidence that there are trait self-esteem differences in self-enhancement ability within the context of appearance-oriented threats, very few have specifically focused on the moderating role of trait self-esteem within the context of objectification theory. Most recently, however, Thøgersen-Ntoumani et al. (2011) provided preliminary evidence that level of trait self-esteem may influence female exercisers' ability to self-enhance following self-threats in the form of self-objectification. Interested in the influence of trait self-esteem on the relationship between self-objectification and various measures of body satisfaction and mood, participants in this study first completed various self-report pretest measures (e.g., trait self-esteem, trait objectification, body evaluation, exercise-related behavior) before completing an exercise clothing experimental manipulation that is similar to Fredrickson, Roberts, Noll, and Twenge's (1998) original swimsuit manipulation. Once in the lab, participants were instructed to try on either tight-fitting exercise clothing (experimental condition) or loose-fitting exercise clothing (control) before completing several self-report measures of mood and body satisfaction states. The authors found that among

participants exposed to objectifying circumstances, trait self-esteem moderated the relationship between appearance evaluation and various aspects of body satisfaction and mood among participants. Specifically, among objectified participants who judged their physical appearance as relatively unattractive, those with HSE were relatively unaffected by the experimental manipulation (i.e., reported less negative appearance-related feelings, lower levels of depression, anger, feelings of fatness, and more satisfaction with shape) compared to LSE participants. Consistent with both Jones and Buckingham (2005) and Park and Maner (2009), Thøgersen-Ntoumani et al. (2011) interpreted the results to support the notion that the experience of appearance-threats (i.e., the experience of objectification) is likely uncomfortable for all females, however, those better able to effectively cope via self-enhancement (i.e., HSE individuals) may effectively protect themselves from experiencing some of objectification's negative effects; in contrast, among those less able to cope via self-enhancement (i.e., LSE individuals) such appearance-related self-threats may negatively impact various aspects of mood and body image. Not only do the results of this study support findings on the effect of trait self-esteem on the relationship between appearance-threats and negative outcomes (i.e., Jones & Buckingham, 2005; Park & Maner, 2009), they also provide the evidence that this pattern of results also exists within the context of objectification theory.

Together, the aforementioned studies seem to present a clear difference in ability among HSE and LSE individuals to engage in self-enhancing behaviors which some have even described as “self-perpetuating”; such that, rather than eliciting self-enhancement,

self-threat appears to elicit behavior that reinforces self-image as a function of trait self-esteem level (Baumeister, 1993, p. 207): among individuals able to maintain positive self-regard (i.e., HSE individuals), self-threat prompts an uncomfortable state which is minimized through self-enhancement behavior (Dodgson & Wood, 1998). Among individuals less able to maintain such positive self-regard (i.e., LSE individuals), however, self-threat may also prompt an uncomfortable state which is met with less effective coping methods (Dodgson & Wood, 1998; Buckingham, Weber, & Sypher, 2012; Campbell & Sedikides, 1999; Leary et al., 1995). Thus, although it is likely that the experience of objectification prompts both HSE and LSE individuals to initially increase the extent to which their self-worth is contingent upon physical appearance, it seems reasonable to expect that compared to LSE individuals, those with HSE will be better able to reduce their appearance-contingent self-worth and, thus, avoid experiencing body shame and subsequent disordered eating behavior.

Present Study

While many bodies of research have primarily focused on the identification of variables that underpin body-image disturbances, many others have focused on the development of theories to organize such variables into structured frameworks and elucidate new avenues of research (e.g., Fredrickson & Roberts, 1997; Tylka & Subich, 2004). Of particular interest to the present study, objectification theory proposes that the sexual objectification of women results in the adoption of a third-party view of the self (i.e., self-objectification) which, in turn, results in both body shame and subsequent

disordered eating behavior. Indeed, the objectification framework has received widespread empirical support as many have found that self-objectification, resulting from sexual objectification, results in both body shame (Augustus-Hovath & Tykla, 2009; Kozee et al., 2007; Kozee & Tykla, 2006; McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Quinn, Kallen & Cathey, 2006; Tiggemann & Slater, 2001; Tykla & Hill, 2004) and disordered eating behavior (Fredrickson, Roberts, Noll, Quinn & Twenge, 1998; Harrison & Fredrickson, 2003; McKinley, 1998; Miner-Rubino, Twenge, Fredrickson, 1998).

Assuming that the objectification process is inherently unpleasant and that maintaining positive self-views is inherently desirable, self-enhancement is a likely behavioral response to self-objectification and subsequent feelings of body shame; individual differences in certain personality characteristics, however, may allow some to engage in self-enhancing behaviors aimed at resisting the development of both body shame and disordered eating behavior (e.g., Tykla & Sabik, 2010; Muehlenkamp & Saris-Baglama, 2002; McCreary Centre Society, 1999). Particularly, trait self-esteem may influence one's perception of, and response to, the objectification process because it has been related to the interpretation of self-threat. Indeed, the trait self-esteem literature presents a discrepancy between HSE and LSE individuals such that, compared to LSE individuals, HSE individuals tend to engage more in behaviors aimed at restoring positive self-regard. One method of such self-enhancement entails decreasing the extent to which one's self-worth is contingent upon a threatened domain. Particularly, Buckingham,

Weber, and Sypher (2012) found that following exposure to attractive female models (i.e., appearance threat), HSE individuals reduced the extent to which their self-worth is based on appearance which, in turn, led them to experience greater body satisfaction. Thus, an additional purpose of the present study was to examine trait self-esteem as a moderator of the effect of sexual and self-objectification on body shame and subsequent disordered eating behavior. I predicted that following experiences of self-objectification, HSE individuals would reduce the extent to which their self-worth was contingent upon appearance and, thus, would experience less body shame and engage in lower levels of disordered eating behavior compared to a control group. On the other hand, I predicted that following self-objectification, women with LSE would increase the extent to which their self-worth was contingent upon appearance and display higher levels of body shame and disordered eating behavior.

III. METHOD

Participants and Procedure

101 female Towson University undergraduates completed the study in small groups in order to partially fulfill a course requirement. To be eligible to participate, all participants were required to have previously completed the 16-item Self Liking/Self Competence Scale (Tafarodi & Swann, 2001) as a part of a larger online pretest. Following Fredrickson, Roberts, Noll, Quinn and Twenge (1998), participants were led to believe that the purpose of the present study was to examine the relationship between health behavior, personality, and consumer behavior. Upon arrival, all participants provided informed consent to both complete questionnaires related to the supposed purpose of the study and to engage in several tasks described as “typical of everyday trips to a shopping mall or grocery store” (Fredrickson, Roberts, Noll, Quinn & Twenge, 1998, p. 274). All participants were then led to individual lab rooms for the remainder of the study. Once in individual lab rooms, participants in the experimental group completed the first portion of the objectification manipulation, Anderson et al.’s (1998) Apparel Fit questionnaire, which they believed measured clothing-related consumer behavior. At this time, participants in the control group completed a filler questionnaire. Upon completion of the distributed questionnaires, participants in both groups notified the experimenter. While participants in the control group then received another filler task, participants in the experimental group then engaged in the second portion of the objectification manipulation which involved recording several body-related measurements which they

were told “often relate to differences in garment style preferences”. The experimenter then distributed a physical measurements sheet (Appendix) and instructed participants to record their physical measurements [e.g., shoulder width, hip circumference, body weight, height, body mass index (BMI)] as the experimenter measured and read each aloud. Both groups then completed Surveillance and Body Shame subscales of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) and a shortened 25-item version of the Contingencies of Self-Worth Scale (CSWS; Crocker et al., 2003), which were embedded within other health-related (e.g., preventative health, health knowledge) distractor questionnaires adapted from Jayanti and Burns’ (1998) health behavior measures. To further disguise the true purpose of the study, both groups then completed a fragrance-related consumer behavior questionnaire. Similar to Fredrickson, Roberts, Noll, Quinn and Twenge’s (1998) procedure, participants in both groups then engaged in a purported food taste test to measure disordered eating behavior.

Measures

Trait Self-Esteem. Participants first completed the 16-item Self Liking/Self Competence Scale (Tafarodi & Swann, 2001). The Self Liking subscale, which consists of 8 Likert Scale items such as, “I am very comfortable with myself” and “I am secure in my sense of self-worth”, was of particular interest because previous research (e.g., Bosson, Brown, Zeigler-Hill, & Swann, 2003; Buckingham, Weber & Sypher, 2012) has suggested it is a good predictor of self-enhancement. The Self Competence subscale was

also included as a distractor measure. The Self Liking subscale was internally consistent, Cronbach's $\alpha = .92$

Objectification Manipulation. Participants in the experimental group individually completed the two-part objectification manipulation. The first portion of the objectification manipulation included portions of Anderson et al.'s (1998) Apparel Fit Preferences of Female Consumers questionnaire which is typically used to measure several aspects of clothing-related consumer satisfaction. Although participants were led to believe the questionnaire was used to measure clothing-related consumer behavior, it was actually used because it includes many multiple-choice items, such as "Please identify your body shape" and "Please indicate whether the following clothing locations (e.g., neck, bust, thigh) cause problems in fit", that inadvertently encourage a state of self-objectification. In addition, a physical measurements sheet (Appendix) was also used to create a situation in which the experimenter and participant discussed participant anthropometric measurements to further reinforce a state of self-objectification.

State Self-Objectification and Body Shame. Both the Surveillance and Body Shame subscales of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) were included to measure both state self-objectification and body shame, respectively. The surveillance subscale includes 8 Likert Scale items such as, "During the day, I think about how I look many times" and is designed to measure the degree to which participants internalize a third-party perspective toward their figures. This subscale was internally consistent, Cronbach's $\alpha = .76$. The body shame subscale includes 8 Likert

Scale items such as, “I would be ashamed for people to know how much I really weigh” and is designed to gauge the extent to which participants perceive that one’s body does not meet ideal cultural body standards and experience subsequent feelings of shame. The body shame subscale was internally consistent, Cronbach’s $\alpha = .79$. Participants were asked to read items on both subscales and rate each from 1 (*strongly disagree*) to 7 (*strongly agree*).

Contingencies of Self-Worth Scale. Participants completed a shortened 25-item version of the Contingencies of Self-Worth Scale (CSWS; Crocker et al., 2003) which includes the following subscales: family support, competition, God’s love, academic competence, virtue, others’ approval, and appearance. Although all subscales were included as distractor items, the appearance subscale was of particular interest. This subscale is comprised of five Likert Scale items which range from 1 (*strongly disagree*) to 7 (*strongly agree*) including, “My self-esteem does not depend on whether or not I feel attractive,” and “When I think I look attractive, I feel good about myself”. The appearance-contingent self-worth subscale was internally consistent, Cronbach’s $\alpha = .71$

Restrained Eating. Participants engaged in a slightly modified version of Fredrickson, Roberts, Noll, Quinn and Twenge’s (1998; Study 2) purported food taste-test to measure restrained eating behavior. First, the experimenter bolstered the cover story by reiterating that the purpose of the activity involves the evaluation of several aspects of a food product through completion of a food-related consumer behavior questionnaire. Next, the experimenter placed a glass of water, two unwrapped Twix bars

on a plate, a napkin, and a modified version of Field, Bergiel, Giesen, and Fields' (2009) food evaluation questionnaire in front of each participant and instructed each to take a large sip of water to "cleanse their palates" before using the questionnaire to evaluate several aspects of the candy bar. The experimenter then explained that participants could take as long as is necessary to complete the questionnaire, but that the food evaluation activity usually takes about 5 minutes to complete. In addition, if participants asked the experimenter how much food they were required to eat, they were instructed to eat as much as they liked because all leftovers would be discarded following the session. Modeling the procedure used by Fredrickson, Roberts, Noll, Quinn and Twenge (1998; Study 2), the experimenter then evaluated participants' responses to Field et al.'s (2009) first question (i.e., "How satisfied are you with the taste of the candy bar?") to ensure that a strong distaste of the candy bar did not influence the amount eaten by participants. Finally, the remaining uneaten food was weighed to quantify participants' level of restraint.

IV. RESULTS

A series of multiple regression analyses were used to examine the effect of objectification, trait self-esteem, and the Objectification X Trait Self-Esteem interaction on appearance-contingent self-worth, body shame and restrained eating, respectively. First, a series of bivariate correlations were conducted on the data; these data are provided in Table 1. Next, trait self-esteem data were mean-centered by converting the data to *Z* scores. A preliminary multiple regression analysis was then conducted as a manipulation check to test the effect of the aforementioned predictor variables on state self-objectification. Neither the main effect of objectification, nor the Objectification X Trait Self-Esteem interaction yielded significant effects ($p > .05$), indicating that the objectification manipulation did not significantly predict state self-objectification as expected. The analysis, however, did yield a significant effect of trait self-esteem on state self-objectification data, $\beta = -.26$, $t(97) = -2.5$, $p < .05$, with *t*-tests of the beta weights indicating a negative relationship: individuals with higher trait self-esteem reported lower state self-objectification.

TABLE 1: **Descriptive Statistics**

Variables	1	2	3	4	5	6
1. Objectification	--	.015	.08	.15	.13	-.28**
2. Trait Self Esteem		--	-.25*	-.30**	-.35**	-.08
3. Surveillance			--	.50**	.53**	-.14
4. Appearance CSW				--	.40**	-.15
5. Body Shame					--	-.03
6. Restrained Eating						--

Next, multiple regression analyses examined the effect of objectification, trait self-esteem, and the Objectification X Trait Self-Esteem interaction on appearance-contingent self-worth and body shame. Again, trait self-esteem scores significantly predicted appearance-contingent self-worth, $\beta = -.279$, $t(97) = -2.8$, $p < .05$. T-tests of the beta weights indicated a negative relationship: Participants with higher trait self-esteem reported lower appearance-contingent self-worth. Likewise, trait self-esteem scores also

significantly predicted body shame, $\beta = -.373$, $t(97) = -3.8$, $p < .05$, with t-tests of the beta weights also indicating a negative relationship: participants with higher trait self-esteem reported lower body shame. Consistent with the result that neither the main effect of objectification, nor the Objectification X Trait Self-Esteem interaction yielded significant self-reported self-objectification, neither the main effect of objectification, nor the Objectification X Trait Self-Esteem interaction significantly predicted self-reported appearance-contingent self-worth or self-reported body shame ($p > .05$).

I conducted a final multiple regression analysis to test whether objectification, trait self-esteem, and the Objectification X Trait Self-Esteem interaction predicted restrained eating behavior. Objectification condition significantly predicted restrained eating behavior, $\beta = -.27$, $t(97) = -2.8$, $p < .05$, with t-tests of the beta weights indicating that participants in the objectification condition consumed significantly less food than participants in the control condition and, thus, demonstrated significantly more restrained eating behavior. Neither the main effect of trait self-esteem, nor the Objectification X Trait Self-Esteem interaction significantly predicted restrained eating behavior ($p > .05$).

V. DISCUSSION

According to objectification theory (Fredrickson and Roberts, 1997), the experience of sexual objectification has become increasingly pervasive in Western society and can be used as a framework to better understand the many negative experiential and mental health consequences that disproportionately impact women, such as body shame and restrained eating. While the relationship between objectification, body shame, and disordered eating has been well-documented (e.g. Augustus-Hovath & Tykla, 2009; Kozee et al., 2007; Kozee & Tykla, 2006; McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Fredrickson, Roberts, Noll, Quinn & Twenge, 1998; Miner-Rubino, Twenge, Fredrickson, 1998), the first purpose of the present study was to manipulate objectification such that, relative to control, the experimental group would report significantly higher levels of self-objectification, body shame, appearance-contingent self-worth and restrained eating behavior. The second purpose of the study was to examine the moderating role of trait self-esteem and the mediating role of appearance-contingent self-worth on the relationship between objectification and both body shame and restrained eating behavior. The results of this study suggest that trait self-esteem level is related to more positive self-evaluations. Specifically, the results indicate that those with higher trait self-esteem reported lower self-objectification, body shame, and appearance-contingent self-worth. The results of this study also indicate, however, that experimental and control groups did not significantly differ in self-reported self-objectification, body shame, or appearance-contingent self-worth. Interestingly, however,

the experimental group did report significantly more restrained eating behavior than the control group.

Given that Fredrickson and Roberts (1997) define objectification as any experience in which females are treated as a body or a collection of body parts valued for others' use, it seemed reasonable to predict that the first portion of the objectification manipulation, which included questionnaire items pertaining to personal clothing size, body shape, and clothing-fit problem-areas, and the second portion of the objectification manipulation, in which participants measured several body parts, compared these measurements to recommended standards (i.e. BMI), and then communicated them to a third-party observer (i.e. the experimenter), would alter participants' perception of their physical bodies in a self-objectifying manner. Although both portions of the objectification manipulation likely produced some level of self-objectification, it seems that neither the experience of responding to a body-related questionnaire, nor being measured by a third-party impacted participants enough to affect responses on questionnaires measuring relevant outcome variables. Furthermore, because there was no significant difference in self-reported self-objectification (i.e. manipulation check) between the experimental and control groups, it seems that the present study's manipulation did not adequately recreate the circumstances present in an actual objectifying experience.

Indeed, a review of other studies which have examined the effects of objectification on similar appearance-related concerns reveals an important

methodological difference which may have impacted the results of the present study. Specifically, many of these studies use an objectification manipulation that encourages visual self-evaluation. As noted, Fredrickson and Roberts (1997) simply describe the self-objectification process as treating oneself as an object to be visually inspected and evaluated and do not specify that women necessarily visually inspect themselves to engage in self-objectification. Thus, according to objectification theory, others' visual evaluations create an imagined self-view that, in turn, creates negative experiential and mental health consequences. According to objectification theory then, the present study's manipulation should have created an experience of self-objectification. Although other studies have also used manipulated objectification through the use of appearance-related feedback (e.g. Gapinski, Brownell & LaFrance, 2003; Tylka & Sabik, 2010; Mills & Miller, 2006) and media images of attractiveness ideals (e.g. Patrick, Neighbors & Knee, 2004; Henderson-King, Henderson-King & Hoffmann, 2001) an overwhelming majority of objectification studies employ a swimsuit (or tight clothing) manipulation in which participants try on swimwear (or tight clothing) and evaluate themselves in front of a mirror for an extended period of time (e.g. Fredrickson, Noll, Roberts, & Twenge, 1998; Quinn, Kallen, Twenge, Fredrickson, 2006; Quinn, Kallen, & Cathey, 2006; Noll, 1997; Thogersen-Ntoumani et al., 2011; Clarke, 2010; Hebl, King & Lin, 2004; Tiggemann & Andrew, 2012). Along the same line, Quinn, Kallen, and Cathey (2006) examined the effect of self-objectification on lingering body-related thoughts and reported that women in the swimsuit condition, who were instructed to view themselves in a mirror for ten

minutes and evaluate their appearance, subsequently reported more lingering body-related thoughts compared to the control condition. As the results of this study also suggest, visually inspecting oneself may be important to maintaining self-objectifying thoughts and, in turn, may be critical to the presence of Fredrickson and Roberts' (1997) experiential and mental health consequences. Indeed, the present study's self-objectification measure (McKinley & Hyde, 1996), which included items such as "During the day, I think about how my body looks many times" and "I often worry about whether the clothes I am wearing make me look good", also seemed to have an underlying emphasis on visual self-inspection. It appears that the discrepancy between these studies' swimsuit objectification manipulation and the present study's clothing questionnaire and measurement objectification manipulation may reveal the importance of a visual self-evaluation component to the objectification experience.

Because the objectification manipulation did not produce the body-oriented thoughts necessary to impact participants' self-reported self-objectification, appearance-contingent self-worth, and body shame, it is interesting that participants in the objectification group consumed significantly less food than the control group. Perhaps the explicit nature of the self-objectification, appearance-contingent self-worth, and body shame measures somehow may have elicited a response bias related to social desirability, whereas the purpose of the disordered eating measure was disguised and, therefore, allowed for more accurate responses. Another possibility, however, could be related to the supposed health-related portion of the study. In addition to the second portion of the

objectification manipulation in which participants recorded their body measurements, participants completed two health-related distractor questionnaires embedded within the dependent measures. Whereas the objectification may not have affected responses on the other questionnaires, it is possible that the second portion of the objectification, in which participants record their BMI and health-related category (i.e. healthy, overweight, or obese), paired with the health-related distractor measures may have impacted participants' eating behavior. Furthermore, the health-related distractor questionnaires, which instruct participants to consider the frequency with which they engage in activities ranging from eating habits to stress management techniques, may have prompted the experimental group to more seriously consider their measurement feedback within a health-related context and, inadvertently, may have influenced eating behavior. Thus, future research should consider the role of objectification and restrained eating behavior independent of health-related motivations.

Consistent with the self-esteem literature, the results of the present study suggest that higher trait self-esteem is related to maintaining positive self-evaluations. Specifically, results of the present study indicate that those with higher trait self-esteem reported lower state self-objectification, body shame, and appearance-contingent self-worth. Inconsistent with much of the literature surrounding objectification theory, however, the results of the present study pertaining to the effect of objectification elucidate many research areas that still have yet to be investigated. In addition to considering the specific circumstances that are critical to the self-objectification process,

future research should also investigate the importance of the general context in which self-objectification occurs. Given that neither a body-related questionnaire, nor third-party body measurements affected responses on relevant outcome variable measures, perhaps the general environment in which objectification occurs is critical to the experience of self-objectification. For example, in the present study, participants were believed their physical measurements to be a health-related portion of the study. Perhaps the present study's results suggest that the experience of objectification is qualitatively different within health-related context compared to an appearance-evaluative (or other unidentified) context. In addition, future research should also investigate the ways in which the experience of self-objectification is impacted by the person perceived to be objectifying. Although Fredrickson and Roberts (1997) propose that the characteristics of the objectifying person are irrelevant to the actual experience of self-objectification, Mills and Miller (2007) reported that participants who received negative weight-related feedback from a peer (undergraduate student) versus a non-peer (graduate student) reported significantly higher anxiety, "feelings of fatness", and body dissatisfaction. Given that the present study's results suggest that the experience of objectification may be qualitatively different within health-related context compared to an appearance-related context, perhaps self-objectification is also impacted by various qualities of the objectifying person. Finally, as already briefly discussed, Fredrickson and Roberts (1997) describe self-objectification as a process in which one treats oneself as an object to be visually inspected; the authors, however, do not specify the importance of visual

self-inspection to self-objectification. Given that the present study's objectification manipulation did not impact self-reported self-objectification, perhaps future research should identify the circumstances that are necessary to a self-objectifying situation and examine their potential impact on negative experiential and mental health consequences. Furthermore, the identification of such circumstances could be critical to preventing self-objectifying behavior that could potentially result in early eating disorder intervention.

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VII. APPENDIX A

Physical Measurements

INSTRUCTIONS: Please inform the experimenter before completing this section of the assessment.

Part A:

- Bust ___(in.)
- Shoulder: ___(in.)
- Waist: ___(in.)
- Abdomen: ___(in.)
- Upper Arm: ___(in.)
- Thigh: ___(in.)

Part B:

- A. Height (in.): _____
- B. Weight (lbs.): _____
- C. Body Mass Index (BMI): _____ (use chart, below)
- D. BMI classification : _____ (use chart, below)

WEIGHT lbs	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215
kgs	45.5	47.7	50.0	52.3	54.5	56.8	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	97.7
HEIGHT in/cm	Underweight				Healthy				Overweight				Obese				Extremely obese							
5'0" - 152.4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
5'1" - 154.9	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	36	37	38	39	40
5'2" - 157.4	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	33	34	35	36	37	38	39
5'3" - 160.0	17	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	32	33	34	35	36	37	38
5'4" - 162.5	17	18	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	31	32	33	34	35	36	37
5'5" - 165.1	16	17	18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	35
5'6" - 167.6	16	17	17	18	19	20	21	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33	34	34
5'7" - 170.1	15	16	17	18	18	19	20	21	22	22	23	24	25	25	26	27	28	29	29	30	31	32	33	33
5'8" - 172.7	15	16	16	17	18	19	19	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	32	32
5'9" - 175.2	14	15	16	17	17	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	31
5'10" - 177.8	14	15	15	16	17	18	18	19	20	20	21	22	23	23	24	25	25	26	27	28	28	29	30	30
5'11" - 180.3	14	14	15	16	16	17	18	18	19	20	21	21	22	23	23	24	25	25	26	27	28	28	29	30
6'0" - 182.8	13	14	14	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29
6'1" - 185.4	13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28
6'2" - 187.9	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27
6'3" - 190.5	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	26
6'4" - 193.0	12	12	13	14	14	15	15	16	17	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26

VIII. APPENDIX B

Informed Consent

Principal Investigator: Allie Sypher

This is a study in which we are examining the relationship between health behavior, personality, and consumer behavior. In this study, you will complete a variety of surveys before then sampling products and providing feedback. Your participation is entirely voluntary. You do not have to participate in the study. Although there are no known risks associated with participation, if you become distressed or uncomfortable you may discontinue your participation at any time and the session will become immediately terminated. Your decision to or not to participate will not influence your grade or class standing. There are no direct benefits associated with participating in the study; however, your participation will aid in the study of human behavior.

Participants must be at least 18 years old.

All information about your responses will remain confidential. We will not show your information to anyone outside of our research team unless you give us written permission and any of your responses will never be linked to your name. If you have any questions, you may ask them now or at any time during the study.

If you should have questions after today, you can call or email the principal investigator, Allie Sypher at (703) 861-2399, asyphel@students.towson.edu, Dr. Justin Buckingham (410) 704-2236 or Dr. Debi Gartland, Chairperson of the Institutional Review Board for the Protection of Human Participants at Towson University. Importantly, if you experience any continued distress following the study, please inform the experimenter and be aware that any prolonged discomfort can be appropriately addressed by contacting Towson University's Counseling Center (410)-704-2512, Monday through Friday, from 8 a.m. to 5 p.m.

I, _____ affirm that I have read and understand the above statements and have had all of my questions answered.

Date: _____

Signature: _____

IX. CURRICULUM VITA

ALLISON K. SYPHER

ACADEMIC PREPARATION

- Towson University, Towson, MD
 - M.A. in Experimental Psychology, 2013
- Lynchburg College, Lynchburg, VA
 - B.S. in Psychology, Cum Laude, 2010
 - English (Writing Emphasis) minor
 - Psychology GPA: 3.56; Cumulative GPA: 3.55

ASSISTANTSHIP

- 2010-present, Graduate Assistant for Dr. Justin Buckingham
- 2008-2010, Research Assistant for Dr. Alisha Walker Marciano

INDEPENDENTLY CONDUCTED RESEARCH

- Thesis Project, Experimental Psychology, M.S, 2012-2013
 - *The effects of objectification and self-esteem on body shame, appearance-contingent self-worth, and restrained eating.*
- First Year Projection, August, 2010- May, 2011
 - *So, How Do I Look: The Relationship Between Negative Feedback, Self-Esteem, and Appearance-Contingent Self-Worth.*
- Undergraduate Honors Thesis, 2009-2010:
 - *Don't Hate Me Because I'm Beautiful: The relationship between facial attractiveness, self-esteem, and self-disclosure on through computer-mediated communication (CMC) websites.*

PROFESSIONAL EXPERIENCE

Graduate Assistant, August, 2010-May, 2012

- Experimental Psychology Department, Towson University, Towson, VA
 - Aided in the preparation, conduction, and report of psychological research
 - Assisted in the organization and assessment of program application files
 - Facilitated additional program tasks, as assigned by the program director

Summer Camp Teacher, June 2010- September, 2010

- Child Development Center, Children's Creative Learning Center (CCLC), Dulles, VA
 - Supervised school-aged children in classroom and field trip environments
 - Organized and implemented both educational and recreational activities
 - Provided daily report of each child's activities to parents

Intern, August-May, 2010

- Child/Adolescent Psychiatry Unit, Virginia Baptist Hospital, Lynchburg, VA
 - Aided in group psychotherapy under the direction of clinical psychologists
 - Facilitated both individual and group conflict resolution tasks
 - Supervised meal and leisure periods

Tutor, August, 2007-May, 2010

- Wilmer Writing Center, Lynchburg, VA
 - Assisted undergraduate and graduate students with all stages of academic writing
 - Reported summary of tutorial sessions to professors
 - Facilitated classroom visits to educate students about the writing process

PUBLICATIONS

- Buckingham, J.T., Weber, A.M., & **Sypher, A.K.** (2012). Self-esteem and self-perpetuating effects of threat on contingencies of self-worth. *Self and Identity*, 11(3), 360-385.
- **Sypher, A. K.** (2010). Sexual selection in modern times. *The Agora: Journal for Undergraduate Scholarly Papers*, 19, Retrieved from : <http://www.agorajournal.org/2010agora.html>

- **Sypher, A.K.** (2010). My Red Coat. *The Prism: Annual Literary Magazine of Lynchburg College*, 103, 55-56.

PAPERS AND POSTERS PRESENTED AT CONFERENCES

- **Sypher, A.K.** (2013). *So, How Do I Look? The Effect of Negative Feedback on Appearance-Contingent Self-Worth*. To be presented at the Association for Psychological Science Convention, Washington DC
- **Sypher, A.K.** (2012, 2013). *The effects of objectification and self-esteem on body shame, appearance-contingent self-worth, and restrained eating*. Presented at the Student Research and Scholarship Expo, Towson University and at the Maryland Psychological Association for Graduate Students Convention, Loyola University.
- **Sypher, A.K.** (2011). *So, How Do I Look? The Effect of Negative Feedback on Appearance-Contingent Self-Worth*. Presented at the Student Research and Scholarship Expo, Towson University.
- **Sypher, A. K.**, Navarro, E., & Emory, D. (2011). *Self-Esteem and Self-Perpetuating Effects of Appearance Threat on Contingencies of Self-Worth*. Presented at the Student Research and Scholarship Expo, Towson University.
- **Sypher, A.K.** (2009-2010). *The relationship between facial attractiveness and self-esteem related to self-reported self-disclosure and self-disclosed information displayed through computer-mediated communication (CMC) websites*. Presented at the Lynchburg College School of Sciences Symposium, Lynchburg, VA, 2009, the annual Virginia Psychological Association meeting, 2010, and the Lynchburg College Student Scholar Showcase, Lynchburg, VA, 2010.
- **Sypher, A. K.** (2009). *The Relationship Between Cyber bullying and Friendship Quality*. Paper presented at the annual Virginia Psychological Association meeting, Williamsburg, VA, and the Lynchburg College Student Scholar Showcase, Lynchburg, VA.

HONORS AND AWARDS

- **Psychology Student of the Year Award**, Lynchburg College, 2010
- **Summa Cum Laude**, Independent Study in Psychology, Lynchburg College, 2010
- **President**, Psi Chi National Honor Society, Lynchburg College, 2009-2010
- **Sigma Tau Delta**, International English Honor Society, 2009-present
- **Omicron Delta Kappa**, National Leadership Honor Society, 2010- present
- **Lynchburg College Dean's List**: Spring, 2007; Spring 2009; Honorable Mention: Fall, 2006; Fall, 2007; Spring, 2008; Fall, 2008

PROFESSIONAL MEMBERSHIPS

- Virginia Psychological Association
- Maryland Psychological Association of Graduate Students
- Association for Psychological Science

