Internalizing Outcomes of Self-Objectification as Predictors of Behavior in Sexual Situations

Kyla Marie Cary
Illinois State University, kmcary@ilstu.edu

Follow this and additional works at: https://ir.library.illinoisstate.edu/etd

Part of the Developmental Psychology Commons, and the Quantitative Psychology Commons

https://ir.library.illinoisstate.edu/etd/927

This Thesis is brought to you for free and open access by ISU ReD: Research and eData. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ISU ReD: Research and eData. For more information, please contact ISUReD@ilstu.edu.
The purpose of the current study was to examine various outcomes of self-objectification by creating latent variables encompassing several outcomes. Self-objectification was expected to predict self-surveillance, the behavioral manifestation of self-objectification. Self-surveillance was then expected to predict a latent variable termed internalizing states which encompassed body shame, appearance anxiety, and sexual self-esteem. Finally, the latent variable of internalizing states was expected to predict a latent variable termed behavior in sexual situations which encompassed sexual assertiveness, control over sexual encounters, and risky sexual behavior. The participants were 383 undergraduate women between the ages of 18 and 25. The majority of participants were European American, and all participants were offered the opportunity to receive extra credit as compensation for participating in the study. Participants completed a survey which included a demographics form and measures of self-objectification, self-surveillance, body shame, appearance anxiety, sexual self-esteem, sexual assertiveness, control over sexual encounters, and sexual risk-taking. Measurement and structural models were tested to examine the created latent variables and the relationships among them. Self-objectification was found to significantly predict self-surveillance, and self-surveillance significantly predicted the latent variable of internalizing states. Finally, the latent variable of internalizing states significantly predicted behaviors in sexual situations.
INTERNALIZING OUTCOMES OF SELF-OBJECTIFICATION AS PREDICTORS OF
BEHAVIOR IN SEXUAL SITUATIONS

KYLA MARIE CARY

A Thesis Submitted in Partial
Fulfillment of the Requirements
for the Degree of

MASTER OF SCIENCE

Department of Psychology

ILLINOIS STATE UNIVERSITY

2018
INTERNALIZING OUTCOMES OF SELF-OBJECTIFICATION AS PREDICTORS OF BEHAVIOR IN SEXUAL SITUATIONS

KYLA MARIE CARY

COMMITTEE MEMBERS:
Marla Reese-Weber, Chair
Jeffrey Kahn
AKNOWLEDGMENTS

I would like to acknowledge my committee chairs, Dr. Marla Reese-Weber and Dr. Jef Kahn, for providing support and guidance throughout the entire thesis process. I would like to thank Dr. Jef Kahn for taking the time to explain statistical analyses and enhance my statistical knowledge. Without the hours spent discussing analyses and running and rerunning LISREL code, I would not have been able to test the models I needed to complete my thesis. I would especially like to thank Dr. Marla Reese-Weber for her continuous encouragement and mentorship over the last several years as I have grown as a scientist. From setting deadlines, to providing insightful feedback, and constantly supporting my decisions and work, Dr. Reese-Weber has been an integral part of my journey at Illinois State.

K. M. C.
CONTENTS

Chapter 1: Statement of the Problem

Chapter 2: Review of the Literature

Section 1: Self-Objectification

Definition

Objectification Theory

Internalizing Outcomes of Self-Objectification

Behavior in Sexual Situations as Outcomes of Internalizing States

Summary

The Current Study

Chapter 3: Method

Participants

Measures

Demographic Information

Self-Objectification

Self-Surveillance

Body Shame

Appearance Anxiety
<table>
<thead>
<tr>
<th>Chapter Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Self-Esteem</td>
<td>20</td>
</tr>
<tr>
<td>Sexual Assertiveness</td>
<td>21</td>
</tr>
<tr>
<td>Control Over Sexual Encounters</td>
<td>21</td>
</tr>
<tr>
<td>Risky Sexual Behavior</td>
<td>22</td>
</tr>
<tr>
<td>Procedure</td>
<td>22</td>
</tr>
<tr>
<td>Pencil-and-Paper Survey</td>
<td>23</td>
</tr>
<tr>
<td>Online Survey</td>
<td>23</td>
</tr>
<tr>
<td>CHAPTER IV: RESULTS</td>
<td>25</td>
</tr>
<tr>
<td>Preliminary Analyses</td>
<td>25</td>
</tr>
<tr>
<td>Hypothesis Testing: Measurement Model Analysis</td>
<td>27</td>
</tr>
<tr>
<td>Hypothesis Testing: Structural Model Analysis</td>
<td>29</td>
</tr>
<tr>
<td>CHAPTER V: DISCUSSION</td>
<td>32</td>
</tr>
<tr>
<td>Limitations and Future Directions</td>
<td>36</td>
</tr>
<tr>
<td>Strengths and Conclusion</td>
<td>38</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>40</td>
</tr>
</tbody>
</table>
# TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Standardized Factor Loadings of Main Variables in Hypothesized</td>
<td>27</td>
</tr>
<tr>
<td>Measurement Model</td>
<td></td>
</tr>
</tbody>
</table>
FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hypothesized structural equation model</td>
<td>15</td>
</tr>
<tr>
<td>2. Final measurement model with freed error covariances depicted</td>
<td>29</td>
</tr>
<tr>
<td>3. Final structural model with beta coefficients reported</td>
<td>31</td>
</tr>
</tbody>
</table>
CHAPTER I: STATEMENT OF THE PROBLEM

A stranger touching her thigh on the bus, catcalls as she walks down the street, feeling bombarded by advertisements and music videos featuring voluptuous, scantily clad women; each of these experiences is an example of the sexual objectification of women, or society treating women as sexual instruments, disregarding their personality characteristics or dignity. These experiences of sexual objectification are virtually unavoidable for women, and when women are relentlessly objectified by others, they themselves begin to self-objectify (Fredrickson & Roberts, 1997). Therefore, it is important to understand the sexual objectification of women as a precursor to self-objectification.

The prevalence of sexual objectification experiences such as degrading comments and groping is widely unknown as these experiences are likely to go unreported by women (Szymansi, Moffitt, & Carr, 2011). However, the prevalence of sexualization in the media is an issue which has gained considerable research interest due to the current media-saturated environment. Content analyses state that women are vastly underrepresented in the media, but when women are portrayed, it is in a negative manner in which women fit traditional gender roles, are subordinated, and/or are sexualized by wearing provocative clothing (Collins, 2011). These sexualized depictions of women perpetuate the idea that women are mere objects meant to be used by others. Research of adolescents ages 13 to 18 has found exposure to sexualized media to be associated with stronger notions of women as sex objects, an effect that held true for not only male participants, but female participants as well (Peter & Valkenburg, 2007). The sexualization and objectification of women in worldwide culture is overwhelming and leads to several negative outcomes for women.
Experiences of sexual objectification have a negative impact on various aspects of women’s psychological well-being leading to increased levels of depression, substance abuse, and sexual dysfunction (Szymanski, Moffitt, & Carr, 2011). In addition to being directly associated with negative psychological and behavioral outcomes, sexual objectification experiences also lead to negative outcomes through women’s self-objectification, a phenomenon described by Fredrickson and Roberts (1997) in their development of Objectification Theory. Objectification Theory states that women internalize sexual objectification experiences and the sexualization of women in their respective cultures and, as a result, self-objectify or think of themselves as objects to be manipulated and used by others. Like sexual objectification experiences in daily life, self-objectification also leads to a multitude of negative outcomes for women including internalizing problems such as body shame, appearance anxiety, and low sexual self-esteem (Calogero & Thompson, 2009; Fredrickson & Roberts, 1997). Self-objectification has been associated with behaviors in sexual situations both individually and through the mediating effects of internalizing states caused by self-objectification as will be discussed in the following literature review. While several previous research studies have examined outcomes of self-objectification individually, the purpose of the current study was to create a model which these individual outcomes group together to create latent variables of self-objectification outcomes. The current study tested a model of self-objectification (Figure 1) in which women’s self-objectification is associated with internalizing states (i.e., body shame, appearance anxiety, and sexual self-esteem) which in turn are associated with behaviors in sexual situations (i.e., sexual assertiveness, control over sexual encounters, and risky sexual behavior). These behaviors in sexual situations are important to understand as they may increase vulnerability to sexual assault (Downing-Matibag & Geisinger, 2009; Stoner et al., 2008).
CHAPTER II: REVIEW OF THE LITERATURE

Self-Objectification

Definition

To define self-objectification, one must first understand general sexual objectification, the precursor which leads one to self-objectify. Sexual objectification may occur in several possible ways including sexual evaluation, and more seriously, sexual violence. Fredrickson and Roberts (1997) argue that perhaps the most common way sexual objectification occurs is through the subtle “sexualized gaze” of others. This sexualized gaze is virtually unavoidable for females of any age and may be experienced in any of three contexts.

The first context in which women experience sexual objectification through the sexualized gaze is during interpersonal and social encounters. In the interpersonal and social context, women are looked at and evaluated by men often and for extended periods of time. Research has shown that, when viewing women, men initially will focus on women’s chests and waists regardless of a woman’s attractiveness (Gervais, Holland, and Dodd, 2013). These experiences of being leered at or ogled are often accompanied by verbal objectification as well by way of sexually evaluative commentary such as “cat-calls” or whistling. The second context of the objectifying gaze includes such previously described interpersonal and social encounters being depicted in visual media. For example, depictions of men gazing at unassuming, attractive women in advertisements. The third and final context in which sexual objectification occurs is through sexualized depictions of women in visual media. The sexual objectification of women and girls in media is an issue which has gained considerable research interest over the last 50 years. Content analyses of television shows and print advertisements have shown increases in the
sexualization of women via these media outlets over the last few decades (Kunkel, Eyal, Finnerty, Biely, & Donnerstein, 2005; Stankiewicz & Roselli, 2008).

As a result of sexual objectification experiences, women begin to adopt a certain view of self. This view is in line with the perspective perpetuated by others such that a woman’s body is no more than a mere instrument, an object to be viewed and evaluated by others. In other words, due to socialization, women begin to view themselves only as objects, a phenomenon termed self-objectification (Fredrickson & Roberts, 1997). To define the term, sexual objectification occurs:

“Whenever a woman’s body, body parts, or sexual functions are separated out from her person, reduced to the status of mere instruments, or regarded as if they were capable of representing her” (Bartky, 1990, p. 35)

Objectification Theory

Fredrickson and Roberts (1997) first proposed objectification theory as a theoretical framework to understand the sexual objectification of women and the intrapersonal psychological consequences that arise from sexual objectification experiences. Women in particular are disproportionately subjected to sexual objectification from others, and the major outcome for women is self-objectification. As women self-objectify, they see others’ evaluations of themselves as depending solely on their physical appearance rather than other personal attributes such as personality or character. Therefore, self-objectification is manifested through constant monitoring of physical appearance, or self-surveillance (Fredrickson & Roberts, 1997).

While feelings of self-objectification are internal and cognitive, self-surveillance is the behavioral manifestation of self-objectification. Because women have been socialized to believe that the female body is an object of male desire and exists to be evaluated and gazed at by men,
women are constantly monitoring their bodies to ensure they comply with cultural body standards and to avoid negative evaluations. The connection between self-objectification and self-surveillance has been supported empirically with researchers finding self-objectification to have a highly significant positive correlation with habitual body monitoring in a sample of adult women (Tiggemann & Lynch, 2001). From sexual objectification experiences and self-objectification, women learn to associate physical appearance with their self-worth, a process which has several negative implications for women including feelings of shame and anxiety (McKinley & Hyde, 1996; Spitzack, 1990).

**Internalizing Outcomes of Self-Objectification**

Objectification theory posits that self-objectification manifested through self-surveillance can lead to negative internalizing states such as body shame, appearance anxiety, and symptoms of dysfunctional sexuality (Fredrickson & Roberts, 1997). As discussed previously, self-objectification leads to habitual body monitoring, or self-surveillance. While women are constantly monitoring their bodies, they are comparing themselves to cultural standards of beauty that are put forth by society, most commonly through the media or advertising. These cultural standards are typically unattainable due to the use of photo-retouching or depictions of dangerously thin models. Women who are unable to meet these standards experience feelings of shame that are specific to their bodies, or body shame.

The connection between self-objectification and body shame has been supported empirically. Research by Monro and Huon (2005) found that self-objectification increased the risk of being negatively affected by exposure to idealized images of women’s bodies. Participant scores for body shame increased significantly in women high in self-objectification after being exposed to idealized images (Monro & Huon, 2005). Further research has attempted to induce
feelings of self-objectification to observe potential outcomes. In one study, groups of women were asked to try on either a swimsuit or a sweater while alone in a dressing room where the women had the opportunity to evaluate their bodies. The women who had been asked to try on a swimsuit scored higher on a measure of self-objectification, which in turn led to significantly higher levels of body shame compared to women who were asked to try on a sweater (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). Replication of this study has found identical results in a sample representative of several ethnic groups including African-American, Hispanic, and Asian-American participants (Hebl, King, & Lin, 2004).

According to objectification theory, self-objectification and self-surveillance also result in appearance anxiety. Appearance anxiety describes women’s feelings of anxiety about the potential for critical evaluation of their bodies by others (Fredrickson & Roberts, 1997). Research has shown that mere anticipation of the objectifying male gaze (being informed they would interact with another male participant) greatly increased college women’s social physique anxiety, or anxiety about their physical appearance in the presence of others (Calogero, 2004). Additionally, results from Monro and Huon (2005) revealed exposure to idealized images of women’s bodies led to increases in appearance anxiety for female participants, an effect that was most salient for participants who were also high in levels of self-objectification.

At the time of its development, objectification theory drew connections between self-objectification and women’s sexual well-being. While Fredrickson and Roberts (1997) did not make connections between self-objectification and the specific sexual well-being aspect of sexual self-esteem, a small body of research has attempted to connect the two concepts (Calogero & Thompson, 2009). In an effort to expand upon the original theory of Fredrickson and Roberts (1997) and to further knowledge on the connection between self-objectification and
internalizing states specific to sexual situations, sexual self-esteem was considered as an outcome of self-objectification in the present study.

Self-esteem, broadly, is a global evaluation of one’s own worth. While global self-esteem involves one’s overall feelings of self-worth, there are also various domain-specific forms of self-esteem. Domain-specific self-esteem describes one’s feelings of self-worth in a specific area such as appearance, social situations, or academics. A relatively new domain of self-esteem describes one’s evaluations of his or her own worth and abilities in sexual situations; this construct has been termed sexual self-esteem. In 1996, Zeanah and Schwarz defined sexual self-esteem and created a measure of the construct: The Sexual Self-Esteem Inventory for Women (SSEI-W). Sexual self-esteem was defined as, “a woman’s affective reactions to her subjective appraisals of her sexual thoughts, feelings, and behaviors” (Zeanah & Schwarz, 1996, p. 3). Sexual self-esteem was divided into five domains developed by examining prior research: Skill/Experience (ability to please or be pleased), Attractiveness (one’s own sense of sexual attractiveness), Control (ability to manage sexual thoughts and feelings), Moral judgment (congruence of sexual behaviors with own morals), and Adaptiveness (compatibility of sexual experience with personal goals).

In discussing the negative outcomes of self-objectification, Fredrickson and Roberts (1997) argued that the effects of self-objectification will often carry over into sexual experiences, impacting women’s sexual thoughts and feelings. While these authors did not mention sexual self-esteem directly, sexual self-esteem has been found to be associated with self-objectification. In a study including samples of college women both in the U.S. and U.K., Calogero and Thompson (2009) found self-objectification to be significantly negatively correlated with sexual self-esteem such that women high in self-objectification reported lower levels of sexual self-
esteem. These authors explained the association by stating that women who self-objectify define their sexuality as being solely for the purpose of attracting a sexual partner and therefore is heavily focused on appearance. Beyond the research conducted by Calogero and Thompson (2009), no other research could be found on the associations between self-objectification, self-surveillance, and sexual self-esteem. The connection between these constructs is deserving of further research. To summarize internalizing outcomes of self-objectification, due to sexual objectification experiences, women are socialized to self-objectify and value themselves solely for their body as an object, leading to an irrational focus on their appearance. Therefore, women who self-objectify are more likely to engage in self-surveillance which leads to overly critical self-evaluations (i.e., body shame and appearance anxiety), especially in the context of sexual encounters (i.e., sexual self-esteem).

**Behaviors in Sexual Situations as Outcomes of Internalizing States**

The theoretical framework of objectification theory explains that self-objectification and self-surveillance lead to women’s negative internal states of increased body shame, increased appearance anxiety, and presumably, decreased levels of sexual self-esteem. These negative subjective experiences can lead to a multitude of negative outcomes. For example, several research studies have linked self-objectification and resulting internalizing states with both depression and disordered eating in women (Tiggemann & Kuring, 2004; Tiggemann & Williams, 2012). An area of research that has received less focus is the effect of self-objectification on sexual functioning, specifically, how internalizing problems resulting from self-objectification lead to certain behaviors in sexual situations.

While originally discussing the impact of self-objectification on sexual functioning, Fredrickson and Roberts (1997) explained that the shame and anxiety that result from constant
body monitoring hinder women’s sexual satisfaction (Fredrickson & Roberts, 1997). Supporting this notion, Steer and Tiggemann (2008) found that feelings of body shame and appearance anxiety, as results of self-objectification and self-surveillance, were related to self-consciousness during sexual activity and, in turn, led to decreased sexual functioning as measured by items such as sexual satisfaction and desire/arousal. Aside from sexual arousal and satisfaction, self-objectification manifested through self-surveillance and the resulting negative experiences of body shame, appearance anxiety, and low sexual self-esteem have been related to other negative sexual experiences such as low sexual assertiveness, low control over sexual encounters, and increased sexual risk-taking.

Before discussing how the internalizing outcomes of self-objectification influence behavior in sexual situations, it is important to note that the impact of body shame, appearance anxiety, and low sexual self-esteem on women’s sexual functioning may take one of two routes. First, these internalizing states have been linked to sexual avoidance (La Rocque & Cioe, 2011). Women who are less comfortable with their bodies, who fear being evaluated by others, and are not confident in their sexual abilities may avoid sexual experiences all together. Second, and in contrast, these internalizing states may not lead women to avoid sexual encounters, but instead, women experiencing body shame, appearance anxiety, and low sexual self-esteem may seek out sexual encounters as reassurance that someone finds her attractive, will evaluate her positively, or increase her confidence in sexual situations. For example, Littleton, Breitkopf, and Berenson (2005) found low body image to be significantly correlated with having a high number of sexual partners in the last year in a tri-ethnic sample of Caucasian, Hispanic, and African-American women. Decreased global self-esteem has also been linked to having a high number of sexual partners (Ethier et al., 2006). To conclude, negative internalizing states that result from self-
objectification may lead women to avoid sexual behavior; however, and crucial to the present study, these internalizing states may also lead to low sexual assertiveness, low control in sexual encounters, and increased risky sexual behavior. Empirical evidence for these relationships will be discussed in greater detail in the following sections.

To begin, the relationships between body shame and behaviors in sexual situations will be discussed. According to Wiederman (2012), women who feel unattractive (i.e., women who experience body shame) also feel less able to assert themselves in sexual situations with male partners. In support of this, empirical research has found links between body shame and sexual assertiveness. Auslander, Baker, and Short (2012) linked low body esteem, a construct similar to body shame, to low assertiveness during sexual encounters, specifically when it comes to contraception use. Participants who reported lower body esteem were less likely to report insisting that their partner use a condom. In a sample of college women, Schooler and colleagues (2005) found participants’ feelings of body shame to be significantly negatively associated with sexual assertiveness; participants who felt greater body shame reported lower sexual assertiveness. In addition to sexual assertiveness, a small amount of research can be found linking body shame to control during sexual encounters. Past research has found women to feel that they have less control over sexual encounters than men (Bryan, Aiken, & West, 1997). Women’s feelings of control during sexual situations may be negatively impacted when a woman feels insecure in her body. With regards to the relationship between body shame and risky sexual behavior, several research studies have found that women who experience higher levels of body dissatisfaction report engaging in more unprotected sex than more body-confident individuals (Gillen, Lefkowitz, & Sheraer, 2006; Wingood, DiClemente, Harrington, & Davies, 2002). Additionally, Woertman and Van den Brink (2012) suggest that body image worries may
interfere with appropriate sexual responses, and negative body image can lead to increased risky sexual behavior. The vast majority of research linking body shame to sexual risk-taking only examines condom use as an indicator of risky sexual behavior. However, there are several other facets of sexual risk-taking including age of first consensual intercourse, number of lifetime sexual partners, having been diagnosed with an STD, and using drugs/alcohol before or during sexual activity. To gain a greater understanding of the link between risky sexual behavior and body shame or any other self-objectification outcomes, a more comprehensive measure of risky sexual behavior was used in the present study.

While associations between body shame and poor sexual functioning have been widely researched, less research can be found on the relationship between appearance anxiety and women’s sexual functioning. Existing research in a sample of college women has linked appearance anxiety, specifically anxiety about being evaluated by a sexual partner, to lower motivation to insist their partner use a condom (Schick, Calabrese, Rima, & Zucker, 2011). With regards to assertiveness and control during sexual situations, current research has not examined a possible link between these constructs and appearance anxiety. More generally, research has shown anxiety to impede cognitive performance (Derakshan & Eysenck, 2009). Thus, appearance anxiety during sexual encounters may be a distraction to women who, as a result, are less assertive and less in control during sexual situations. Further research is needed to determine a link between appearance anxiety and assertiveness and control in sexual encounters.

Finally, the internalizing state of low sexual self-esteem can be linked to behaviors in sexual situations such as sexual assertiveness, control over sexual encounters, and risky sexual behavior. Higher levels of sexual self-esteem have been found to be associated with more assertiveness and willingness to communicate in sexual situations (Oattes & Offman, 2007). On
the other hand, low sexual self-esteem has been linked to low assertiveness in sexual situations. In a sample including both women and men, participants who reported lower levels of sexual self-esteem scored lower on a measure of sexual assertiveness than participants with higher levels of sexual self-esteem. It was concluded that individuals who have lower levels of sexual self-esteem are less likely to be assertive in sexual situations and communicate with their partners about issues such as condom use (Ménard & Offman, 2009). Women who are low in sexual self-esteem may be less assertive in sexual situations due to fear of rejection by their sexual partners. No research can be found linking sexual self-esteem to control over sexual encounters. However, a negative correlation between the two constructs can be predicted. With regards to risky sexual behavior, much of the research on the associations between sexual self-esteem and sexual risk-taking come from literature on the outcomes of child sexual abuse. For example, research has shown low sexual self-esteem and risky sexual behaviors to be concurrent for child sexual abuse survivors (Van Bruggen, Runtz, & Kadlec, 2006). Less research has been dedicated to how differing levels of sexual self-esteem may lead to risky sexual behaviors. Seal, Minichiello, and Omodei (1997) found sexual self-esteem to be negatively associated with risky sexual behavior only in casual sexual relationships. While research has shown self-objectification to be negatively associated with sexual self-esteem, further research is needed to uncover how sexual self-esteem as an internalizing outcome of self-objectification may predict behavior in sexual situations.

Summary

Objectification Theory states that self-objectification occurs as a result of women’s unrelenting experiences of sexual objectification. Self-objectification then results in habitual body monitoring, or self-surveillance. Additionally, self-surveillance, the immediate behavioral
outcome of feelings of self-objectification, causes women to experience heightened body shame, appearance anxiety and dysfunctional sexuality (Fredrickson & Roberts, 1997).

Previous research has found links between self-objectification and negative internalizing outcomes in women, such as increased body shame, increased appearance anxiety, and more recently, lowered sexual self-esteem (Calogero, 2004; Calogero & Thompson, 2009; Monro & Huon, 2005). While links between self-objectification, self-surveillance, and internalizing states are strongly supported by the literature, less research has found links between these internalizing states and behavior in sexual situations including lowered sexual assertiveness, lower feelings of control over sexual situations, and increased risky sexual behavior. In order to increase understanding of the pattern of outcomes of self-objectification, a more complete model of outcomes must be created.

The Current Study

The purpose of this study was to create a more complete model of self-objectification consequences in which several levels of outcomes were considered. While previous research has examined outcomes of self-objectification individually, the present study created latent variables to encompass two major types of outcomes of self-objectification: internalizing states and behaviors in sexual situations. Along with examining the internalizing outcomes of body shame and appearance anxiety, the present study contributed to previous self-objectification research by adding sexual self-esteem as an internalizing outcome of self-objectification. Therefore, the latent variable of internalizing states included body shame, appearance anxiety, and lowered sexual self-esteem. In addition, the proposed model aimed to provide greater insight into how these internalizing states predict various behaviors in sexual situations. The latent variable created to encompass behaviors in sexual situations included lowered sexual assertiveness,
lowered control over sexual encounters, and increased sexual risk-taking. Taken together, the final model created in the present study was one in which self-objectification leads to the behavioral manifestation of self-surveillance which, in turn, leads to internalizing outcomes (body shame, appearance anxiety, sexual self-esteem) which would then predict behaviors in sexual situations (sexual assertiveness, control over sexual encounters, risky sexual behavior).

Hypothesis 1 involved creating a measurement model of self-objectification outcomes. Self-objectification and self-surveillance remained measured variables. Body shame, appearance anxiety, and low sexual self-esteem were expected to load onto one latent variable termed negative internalizing states. Sexual assertiveness, control over sexual encounters, and increased engagement in risky sexual behavior were expected to load onto one latent variable termed effective behaviors in sexual situations.

Hypothesis 2 involved testing a structural equation model in which self-objectification led first to self-surveillance which, in turn, led to the previously created latent variable of negative internalizing states followed by effective behaviors in sexual situations.

H2a: The measured variable of self-objectification will significantly positively predict the measured variable of self-surveillance

H2b: The measured variable of self-surveillance will significantly positively predict the latent variable of negative internalizing states.

H2c: The latent variable of internalizing states will significantly negatively predict the latent variable of effective behaviors in sexual situations.
Figure 1. Hypothesized structural equation model. Note that self-objectification and self-surveillance are depicted as latent variables in this figure, but they were treated as measured variables conceptually.
CHAPTER III: METHOD

Participants

Participants were recruited using the Illinois State University Psychology Department online participant pool (SONA system). The study began by collecting data from participants who completed pencil-and-paper surveys. An in-person data collection method was preferred because of the sensitive nature of measures including questions about sexual behavior and sexual assault (a measure included in the survey, but not in this thesis). The pencil-and-paper survey sample originally consisted of 156 participants. Following Klem (1995), researchers should gather 5 to 10 observations for each predicted parameter in a given model. The model for the present study includes 12 total parameters; therefore, according to Klem (1995), 120 participants would be needed to conduct the proposed structural equation analysis. Additionally, MacCallum, Browne, and Sugawara (1996) provides a table of suggested sample sizes needed to obtain power of 0.80 in a structural equation analysis by examining degrees of freedom. The model in the present study had 24 degrees of freedom, therefore, according to MacCallum and colleagues, a sample of around 350 participants would be required to obtain necessary power for the proposed structural equation analysis. Taking into account the suggestions from both Klem (1995) and MacCallum, Browne, and Sugawara (1996), it was determined the current sample would need to include around 250 participants in order to conduct the proposed structural equation analysis. Because I was unable to collect the appropriate number of participants using the pencil-and-paper methods, I decided to allow participants to complete the survey online. After obtaining permission from the IRB to put the survey online, participants signed up to complete the online survey using the Psychology Department’s online SONA system. The online sample consisted of 226 participants.
Only participants ranging in age from 18- to 25 years were asked to complete the surveys. This age range is typically referred to as emerging adulthood and is an important developmental stage (Arnett, 2000). Past self-objectification research has typically included adolescent, emerging adult, and adult samples. Because the present study is interested in how self-objectification impacts sexual behaviors, emerging adult women were chosen as the group of interest for this research. According to the CDC, 57.2% of female American adolescents in the 12th grade have ever had sexual intercourse (CDC, 2015). The prevalence of sexual intercourse among college students is not well known; however, transitioning into college leads to more freedom and less regulation of emerging adults allowing for a higher likelihood of having engaged in sexual intercourse. In the current sample, 85.5% of participants reported having engaged in sexual intercourse at least once.

In total, 382 participants completed the survey either in-person or online. Of these participants, 50 were eliminated due to falling outside of the required age range, completing survey measures incorrectly, or failing attention check questions. Therefore, the final sample consisted of 332 undergraduate women who attended Illinois State University. Of the final 332 participants, the average age was 19.51 (SD = 1.32). The majority of participants identified as European-American (74.3%), followed by Black/African-American (10.0%), Hispanic/Latinx (7.6%), mixed ethnicity (5.1%), Asian-American (1.8%), Middle-Eastern/North African (0.3%), or “other” (0.9%).

Measures

Demographic Information

The demographic measure asked participants about their age, gender, ethnic background, family composition, and parents’ education.
Self-Objectification

Self-objectification was measured using the Self-Objectification Questionnaire (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). This questionnaire asks respondents to rank a list of body attributes in order of importance to their self-concept. Items are ranked from most important (rank = 1) to least important (rank = 10). Of the ten attributes listed, five pertain to appearance (physical attractiveness, weight, sex appeal, measurements, muscle tone), and five pertain to physical competence (strength, physical coordination, health, physical fitness, physical energy level). Ranks for both the appearance and competence attributes are summed and used to compute a difference score which can range from -25 to 25. Higher scores reveal a greater emphasis on physical appearance and, therefore, a higher level of self-objectification. Noll and Fredrickson (1998) found scores on the Self-Objectification Questionnaire to demonstrate convergent validity with measures of appearance anxiety (Appearance Anxiety Questionnaire; Dion, Dion, & Keelan, 1990) and body image (Body Image Assessment; Williams et al., 2001).

Self-Surveillance

Self-surveillance was measured using the body surveillance subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996). The body surveillance subscale consists of 8 items used to evaluate valuing how the body looks more so than how it feels or functions. Sample items are: “I rarely think about how I look” [reverse scored] and “I think more about how my body feels than how my body looks” [reverse scored]. Participants respond to each item using a 7-point scale (0 = strongly disagree, 6 = strongly agree). A scale mean was calculated for each participant with higher scores indicating more frequent monitoring of one’s appearance and thinking of the body in terms of how it looks. Subscale items have
yielded a Cronbach’s alpha of .89 in a sample of college women (McKinley & Hyde, 1996). In the present study, the subscale demonstrated acceptable internal consistency (α = .74).

**Body Shame**

Body shame was measured using the body shame subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996). The body shame subscale consists of 8 items used to evaluate feelings of shame as a result of failing to meet internalized standards of beauty (sample item: “I feel like I must be a bad person when I don’t look as good as I could”). Participants respond to each item using a 7-point scale (0 = *strongly disagree*, 6 = *strongly agree*). A scale mean was calculated for each participant with higher scores indicating the participant feels like she is a bad person if she does not meet cultural standards of beauty. With regards to discriminant validity, body shame has been shown to emerge as a separate factor from body surveillance (Moradi & Huang, 2008). In a sample of college women, subscale items yielded a Cronbach’s alpha of .75 (McKinley & Hyde, 1996). In the present study, the subscale demonstrated good internal consistency (α = .83). For participants completing the online version of the survey, at the mid-point of the Objectified Body Consciousness Scale, the following attention check question was added: “Please select ‘strongly disagree’ as your response to this question”).

**Appearance Anxiety**

Appearance anxiety was measured using the Social Appearance Anxiety Scale (SAAS; Hart, Flora, Palyo, Fesco, Holle, & Heimberg, 2008). The measure consists of 16 items used to assess anxiety about being negatively evaluated by others because of one’s overall appearance, including body shape (sample items: “I am afraid people find me unattractive,” and “I worry people will judge the way I look negatively”). Participants responded to items using a 5-point
scale to determine whether the statement was characteristic or true of oneself (1 = not at all, 5 = extremely). Item scores were then added and averaged for each participant with higher scores indicating higher levels of social appearance anxiety. The SAAS has demonstrated a unifactorial structure, high test-retest reliability, and good internal consistency in a sample of both male and female undergraduate students (Hart et al., 2008). In the present study, the subscale demonstrated excellent internal consistency (α = .96).

**Sexual Self-Esteem**

Sexual self-esteem was measured using the Sexual Self-Esteem Inventory for Women - Short Form (Zeanah & Schwarz, 1996). The SSEI short form consists of 35 items that assess for participants’ feelings about their sexuality regarding five subscales: skill and experience (e.g., “I feel good about my ability to satisfy my sexual partner”), attractiveness (e.g., “I am proud of my body”), control (e.g., “I worry I will be taken advantage of sexually” [reverse scored]), adaptiveness (e.g., “I like what I have learned about myself from my sexual experiences”), and morality (e.g., “My sexual behaviors are in line with my moral values”). Participants responded to each item on a 6-point scale (1 = strongly disagree, 6 = strongly agree). To create an overall sexual self-esteem score, item scores were added and averaged with lower scores indicating lower levels of sexual self-esteem. The measure has been found to have good construct validity, and each of the five subscales have been found to have high internal consistency with Cronbach’s alphas ranging from .85 to .94 in a sample of college women (Zeanah & Schwarz, 1996). In the present study, participants’ mean score on the scale was used for analysis. The complete scale demonstrated excellent internal consistency (α = .93). For participants completing the online version of the survey, at the mid-point of the SSEI, the following attention check question was added: “Please select ‘strongly agree’ as your response to this question”).
Sexual Assertiveness

Sexual assertiveness was measured using the sexual refusal assertiveness subscale of the Sexual Assertiveness Scale (SAS; Morokoff et al., 1997). The whole scale consists of four 6-item subscales that assess the frequency with which women engage in sexual initiation assertiveness (e.g., “I begin sex with my partner if I want to”), sexual refusal assertiveness (e.g., “I refuse to have sex if I don’t want to, even if my partner insists”), contraception/STD prevention assertiveness (e.g., “I refuse to have sex if my partner refuses to use a condom or latex barrier”). The fourth subscale examines information communication (e.g., “I would ask if I want to know if my partner ever had an HIV test”).

Participants were asked to think about a person they usually have sex with or someone they used to have sex with regularly and to respond the items with that person in mind. If an item does not apply to a participant, he or she is asked to think about what they would do in each situation. Responses were made on a 5-point scale (1 = never, 2 = sometimes, 3 = about half of the time, 4 = usually, and 5 = always); item responses were averaged to yield a scaled score with higher scores indicating higher levels of assertiveness. The SAS has been found to be reliable for assessing and understanding women’s sexual assertiveness (Morokoff et al., 1997). For the purposes of this study, only responses to the sexual refusal subscale (6 items) were examined as a measure of sexual assertiveness. Previous research has focused solely on this subscale as it relates most closely to sexual victimization (Franz, DiLillo, & Gervais, 2016). In the present study, the subscale demonstrated acceptable internal consistency (α = .76).

Control Over Sexual Encounters

Bryan, Aiken, & West (1997) created a 4-item measure of control over sexual encounters that was used in this study (sample item: “I believe I can decide when in the relationship we will...”)
have sex”). Participants responded to each item on a 7-point scale (0 = strongly disagree, 6 = strongly agree), and a scale mean score was be calculated. Higher scores on this measure indicate greater feelings of control over sexual encounters. In the present study, the subscale demonstrated acceptable internal consistency (α = .73).

**Risky Sexual Behavior**

Sexual risk-taking is most commonly considered to include behaviors such as having a high number of lifetime sexual partners, having been diagnosed with an STI, early age of first consensual sexual intercourse, having unprotected sex (lack of condom use), and using alcohol and/or drugs during sex. For the present study, risky sexual behaviors were assessed using items from the 2013 Youth Risk Behavior Survey (CDC, 2013) as well as additional items regarding the use of contraception and casual sex. Some items required only a yes-or-no response (e.g., “The last time you had sexual intercourse, did you or your partner use a condom?”), and other questions required an open-ended response (e.g., “During your life, with how many people have you had oral, vaginal, or anal intercourse?”). Participant responses were recoded such that each item response that represents risky sexual behavior was coded as “1” and responses that do not indicate risky sexual behavior were coded as “0”. For example, participants who reported having more than 6 lifetime sexual partners were considered “risky” and coded as 1. These recoded responses were summed to create an overall sexual risk-taking score ranging from 0-6 with higher scores representing a higher frequency of engaging in risky sexual behaviors.

**Procedure**

For the current study, data were collected from participants who completed a pencil-and-paper survey and participants who completed an online survey. Participants were recruited
during the middle of the fall 2017 semester and beginning of the spring 2018 semester by signing up using the psychology department’s SONA system.

**Pencil-and-Paper Survey**

Participants gathered in large lecture hall classrooms and were seated in every other seat to ensure privacy. A research assistant addressed the groups of participants and provided instructions for the study before passing out an informed consent document. After reading and signing the informed consent document, participants completed a pencil-and-paper survey including all measures previously described. The survey was counterbalanced so that there were two versions of the survey that were distributed evenly among participants. Participants were provided with manila envelopes to place their surveys in before depositing them into a large collection box; this method ensured that research assistants had no direct contact with the surveys during the collection procedure. Before exiting the study, participants were given a written debriefing statement that included contact information for the principal investigator, as well as information for student counseling services should the participant have wished to discuss their responses with a counselor. Additionally, research assistants were trained in assessing and handling potential emotional distress in participants.

**Online Survey**

Participants who completed the online version of the study were recruited using the Psychology department’s SONA system. Once participants had signed up for the study, they were provided with a link to the online survey that was created using Qualtrics. Participants were provided the same informed consent that the in-person participants received and were not allowed to continue to the survey unless they selected the option “I am at least 18 years of age and agree to participate”. The online survey was counterbalanced to match the pencil-and-paper
survey, and an algorithm was created so that every other participant was provided with the
counterbalanced version of the study. Participants were free to skip any questions they did not
wish to answer and could close out of the survey at any time. Attention check questions were
added to the online survey to assess for participants who rushed through question responses.
Twice throughout the online survey participants were asked to select a specific answer as a
response (e.g., “Please respond ‘Strongly Agree’ as your response to this question”). After
completing the online survey, participants were directed to the same debriefing information the
in-person participants received which contained contact information for the principal
investigator, as well as information for student counseling services.
CHAPTER IV: RESULTS

Preliminary Analyses

Multiple $t$-tests were conducted to examine any potential differences between participants who had completed the pencil-and-paper version of the survey and participants who had completed the online version of the survey. Mean scores on self-surveillance, appearance anxiety, sexual self-esteem, sexual assertiveness, control over sexual encounters, and risky sexual behavior did not significantly differ between the two groups of participants. However, it was determined that mean scores of self-objectification and body shame were significantly different between the two groups. Participants who completed the pencil-and-paper survey scored significantly lower on self-objectification ($M = 4.04$, $SD = 13.08$) in comparison to participants who completed the online survey ($M = 0.64$, $SD = 13.83$), $t(330) = -2.03$, $p = .04$, $d = 0.22$. Participants who completed the pencil-and-paper survey also scored significantly lower on body shame ($M = 3.59$, $SD = 1.27$) in comparison to participants who completed the online survey ($M = 3.87$, $SD = 1.24$), $t(330) = -2.03$, $p = .04$, $d = 0.22$. Effect sizes for these differences were small indicating that any differences between groups was likely due to random error.

Means, standard deviations, and correlations of all main variables can be found in Table 1. As predicted, self-objectification was significantly positively associated with self-surveillance. Additionally, self-surveillance was significantly positively associated with body shame and appearance anxiety and was significantly negatively associated with sexual self-esteem. Body shame and appearance anxiety were both significantly negatively associated with sexual assertiveness and control over sexual encounters; however, neither body shame nor appearance anxiety were correlated with risky sexual behavior. Finally, sexual self-esteem was significantly positively associated with sexual assertiveness and control over sexual encounters. Interestingly,
sexual self-esteem was significantly positively correlated with risky sexual behavior, a relationship that was the opposite of what was hypothesized as it was expected that participants with higher sexual self-esteem would be less likely to engage in risky sexual behaviors.

Table 1

Correlations, Means, and Standard Deviations among Survey Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-Objectification</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2. Self-Surveillance</td>
<td>.48**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>3. Body Shame</td>
<td>.26**</td>
<td>.60**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>4. Appearance Anxiety</td>
<td>.31**</td>
<td>.56**</td>
<td>.68**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5. Sexual Self-Esteem</td>
<td>-.19**</td>
<td>-.31**</td>
<td>-.43**</td>
<td>-.54**</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6. Sexual Assertiveness</td>
<td>-.18**</td>
<td>-.22**</td>
<td>-.24**</td>
<td>-.23**</td>
<td>.32**</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>7. Control</td>
<td>-.12*</td>
<td>-.15**</td>
<td>-.18**</td>
<td>-.26**</td>
<td>.48**</td>
<td>.61**</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>8. Risky Sexual Behavior</td>
<td>.12**</td>
<td>.09</td>
<td>.05</td>
<td>-.00</td>
<td>.13*</td>
<td>-.23**</td>
<td>-.14*</td>
<td>--</td>
</tr>
</tbody>
</table>

| M           | 2.06   | 4.92   | 3.76   | 2.64   | 4.35   | 4.05   | 4.33   | 2.20   |
| SD          | 13.61  | 1.01   | 1.26   | 1.02   | 0.80   | 0.82   | 0.74   | 1.28   |

*p < .05, **p < .01
Hypothesis Testing: Measurement Model Analysis

Before testing the fit of the hypothesized structural model, the hypothesized measurement model was assessed. The measurement model was tested using LISREL 9.30 Student Version. Due to missing data on one or more variables each, 7 cases were excluded from the measurement model analysis leading to a final 325 observations. A variance-covariance matrix with the eight measured variables was used as input data for the measurement model. The code for analyzing the measurement model was created with self-objectification and self-surveillance each loading on their own respective latent variables each with a factor loading of 1.0. Body shame, appearance anxiety, and sexual self-esteem were loaded onto the latent variable of negative internalizing states. Finally, sexual assertiveness, control over sexual encounters, and risky sexual behavior were loaded onto the latent variable of effective behaviors in sexual situations. Factor loadings for the main variables can be found in Table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Self-Objectification</th>
<th>Self-Surveillance</th>
<th>Internalizing States</th>
<th>Behaviors in Sex. Situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-objectification</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-surveillance</td>
<td></td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Shame</td>
<td></td>
<td>--</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td>Appearance Anxiety</td>
<td></td>
<td>--</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>Sexual Self-esteem</td>
<td></td>
<td>--</td>
<td>-0.56</td>
<td></td>
</tr>
<tr>
<td>Sexual Assertiveness</td>
<td></td>
<td>--</td>
<td></td>
<td>0.82</td>
</tr>
<tr>
<td>Control Over S.E.</td>
<td></td>
<td>--</td>
<td></td>
<td>0.77</td>
</tr>
<tr>
<td>Risky Sexual Behavior</td>
<td></td>
<td>--</td>
<td></td>
<td>-0.30</td>
</tr>
</tbody>
</table>
To determine whether the measurement model was an appropriate fit to the data, several fit indices were examined. The Likelihood Ratio chi-square is a measure of how well data fits a hypothesized model with a smaller chi-square ratio representing better fit. The Confirmatory Fit Index (CFI) is an incremental fit index that determines how well the hypothesized model fits the data as opposed to a baseline model in which there are no latent variables and covariances between variables are 0. The CFI has a cut-off value of 0.95 to indicate good fit (Hu & Bentler, 1999). The Root Mean Square Error of Approximation (RMSEA) and Standardized Mean Square Residual (SRMR) are both absolute fit indices that determine how well the hypothesized model reproduces the data. The cut-off values for the RMSEA and SRMR are, respectively, 0.06 and 0.08 (Hu & Bentler, 1999).

Fit indices for the hypothesized measurement model indicated less-than-perfect fit to the data, \( \chi^2(16, N = 325) = 117.40, p < 0.001, \) CFI = 0.88, RMSEA = 0.14, SRMR = 0.07. Modification indices were then examined to determine whether any covariances among variables needed to be freed. The modification indices indicated that the error covariances between self-surveillance and body shame; sexual self-esteem and sexual assertiveness; and sexual self-esteem and control over sexual encounters needed to be freed. The code for the LISREL analysis was edited to allow for the previously mentioned error covariances to be freed leading to a significant improvement in fit of the measurement model, \( \chi^2(13, N = 325) = 28.22, p = 0.01, \) CFI = 0.98, RMSEA = 0.06, SRMR = .04. A representation of the final measurement model can be found in Figure 2.
Figure 2. Final measurement model with freed error covariances depicted.

Hypothesis Testing: Structural Model Analysis

After determining the updated measurement model to be a good fit to the data, the hypothesized structural model was analyzed using LISREL 9.30 Student Version maximum-likelihood procedure using the same variance-covariance matrix as was used to test the measurement model. In contrast to testing the measurement model, testing the structural model determines whether the causal flow from one variable to the next was hypothesized appropriately. For the proposed structural model, it was hypothesized that self-objectification would predict self-surveillance, self-surveillance would predict the latent variable of internalizing states, and the latent variable of internalizing states would predict the latent variable of behaviors in sexual situations. Again, for this analysis, self-objectification and self-
surveillance were considered to load onto their own latent variables each with a factor loading of 1.0, and the appropriate variables for negative internalizing states and effective behaviors in sexual situations were considered to load onto their respective proposed latent variables. Fit indices indicated the hypothesized structural model was a good fit to the data, $\chi^2(16, N = 325) = 31.97, p = 0.01$, CFI = 0.98, RMSEA = 0.06, SRMR = 0.05. In comparing the measurement and structural models, the chi-square difference value was not significant, $\Delta\chi^2(3, N = 325) = 3.75, p = 0.29$. The non-significant difference chi-square indicates that the more-parsimonious structural model can be preferred to the less-parsimonious measurement model.

The structural model, including beta coefficients and factor loadings, can be found in Figure 3. Beta coefficients for the relationships between each variable in the causal model were determined to be significant. To be considered significant at the 0.05 level, the $t$-value for the beta coefficient must be greater than $|2|$. Within the structural model, self-objectification significantly positively predicted self-surveillance, ($\beta = 0.48$, $t$-value = 10.08). Self-objectification explained 23% of the variance in self-surveillance; Hypothesis 2a was therefore supported. In addition, self-surveillance significantly positively predicted negative internalizing states, ($\beta = 0.63$, $t$-value = 9.25). Self-surveillance explained 40% of the variance in negative internalizing states; Hypothesis 2b was therefore supported. Finally, negative internalizing states significantly negatively predicted effective behaviors in sexual situations, ($\beta = -0.33$, $t$-value = -4.81). Internalizing states explained 12% of the variance in effective behaviors in sexual situations; Hypothesis 2c was therefore supported.
Figure 3. Final structural model with beta coefficients reported.
CHAPTER V: DISCUSSION

The purpose of the current study was to examine psychological and behavioral outcomes of self-objectification. Specifically, this study was the first to create latent variables of successive outcomes of self-objectification. The proposed model was one in which the immediate outcome of self-objectification is constant monitoring of one’s body, or self-surveillance. Self-surveillance was then expected to predict a latent variable termed internalizing states which included body shame, appearance anxiety, and sexual self-esteem. Finally, the latent variable of internalizing states was expected to predict behaviors in sexual situations which included sexual assertiveness, control over a sexual encounter, and risky sexual behavior.

Initial analyses examining correlations between variables found significant associations between the variables of interest. Contrary to expectations, body shame and appearance anxiety were not found to be correlated with risky sexual behavior. Additionally, sexual self-esteem was found to have a significant positive correlation with risky sexual behavior, an association which was in the opposite direction than what was expected. However, similar results have been found in previous research. Seal, Minichello, and Omodei (1997) found sexual self-esteem to be significantly positively associated with sexual risk-taking among female college students such that participants with higher sexual self-esteem were more likely to engage in sexual risk-taking. While these results were contrary to expectations, a woman who has higher sexual self-esteem may be more likely to engage in sexual activity given she is more confident in sexual situations. Increased engagement in sexual activity can lead to increased sexual risk taking due to an increase in number of lifetime partners and an increase in potential exposure to sexually transmitted diseases, as examples. Given the nonexistent and converse associations with risky
sexual behavior along with the low reliability of the risky sexual behavior measure in this study, it is likely that a different measure of sexual risk-taking should be used to examine risky sexual behavior as a potential outcome of self-objectification.

Initial analysis of the measurement model did not find the model to be an appropriate fit to the data, and modification indices were examined. The modification indices indicated that measurement errors between some variables would need to be allowed to covary in order to improve model fit. Therefore, the error covariances between self-surveillance and body shame; sexual self-esteem and sexual assertiveness; and sexual self-esteem and control over sexual encounters were freed to improve model fit. It should be noted that, for a measurement model to be identified, measurement error of measured variables should not covary across latent variables (Bollen, 1989). Due to the freed error covariances previously discussed, the measurement model identification is ambiguous. The error covariances between sexual self-esteem, sexual assertiveness, and control over sexual encounters may indicate that these three variables may be more likely to load on a new latent variable which encompasses variables related to sexuality. A plausible alternative model may be one in which the internalizing states of body shame and appearance anxiety load onto a latent variable that could be termed “body related outcomes,” and sexual self-esteem, sexual assertiveness, and control over sexual encounters may load onto a latent variable that could be termed “sexuality related outcomes.”

This study was the first to group outcomes of self-objectification into latent variables; however, previous theory and research has suggested these internalizing states and behaviors in sexual situations variables to be related. The foundation of objectification theory first introduced body shame and appearance anxiety as two main outcomes of self-objectification theory which are related, but separate, entities. Fredrickson and Roberts (1997) also proposed dysfunctional
sexuality as another outcome of self-objectification. A limited amount of research has found evidence of an association between self-objectification and lowered sexual self-esteem as an aspect of dysfunctional sexuality. For this study, I wanted to add sexual self-esteem as an outcome of self-objectification that is similar to body shame and appearance anxiety in that it is an internalizing outcome of self-objectification that can affect how women behave in sexual situations. This addition was supported by the highly significant correlation between self-objectification and sexual self-esteem, and sexual self-esteem was also highly significantly correlated with self-surveillance. The creation of a latent variable encompassing body shame, appearance anxiety, and sexual self-esteem is in line with objectification theory which initially proposed body shame, appearance anxiety and dysfunctional sexuality as outcomes of self-objectification. The high factor loadings of body shame, appearance anxiety, and sexual self-esteem on the internalizing states latent variable found in the present study support the assumptions made by Fredrickson and Roberts (1997).

While previous research has examined sexual assertiveness and control over sexual encounters as simultaneous outcomes of self-objectification, this study was the first to create a latent variable encompassing several behaviors in sexual situations as outcomes of internalizing states that are predicted by self-objectification. Previous research has found strong ties between body shame (internalizing state) and both (a) lowered sexual assertiveness (behavioral) and (b) increased sexual risk-taking (behavioral) (Schooler et al., 2005; Woertman & Van den Brink, 2012). Research has also linked appearance anxiety (internalizing state) with behaviors in sexual situations, more specifically, risky sexual behaviors (Schick, Calabrese, Rima, & Zucker, 2011). However, no previous research studies have grouped these variables together to be considered as later outcomes of self-objectification. The present study found support for considering sexual
assertiveness, control over sexual encounters, and risky sexual behavior into one latent variable encompassing behaviors in sexual situations.

After determining the measurement model to be a good fit to the data, a structural model was tested. In contrast to the measurement model, the structural model determined whether the measured variables and created latent variables successfully predict one another in the expected directions. The structural model was found to be a good fit to the data. Fredrickson and Roberts (1997) first suggested that self-surveillance is an immediate behavioral outcome of self-objectification. Additionally, Tiggemann and Lynch (2001) found self-objectification to be significantly associated with habitual body monitoring, or self-surveillance. Supporting this previous research, in the present study, self-objectification was found to significantly predict self-surveillance.

As hypothesized, self-surveillance was found to significantly positively predict internalizing states. As originally proposed by Fredrickson and Roberts (1997), previous research has found feelings of self-objectification behaviorally manifested through self-surveillance to be a predictor for both body shame and appearance anxiety. Monro and Huon (2005) identified both increased body shame and increased appearance anxiety as outcomes of experimentally heightened levels of self-objectification. Calogero and Thompson (2009) were the first to link self-objectification and sexual self-esteem and found higher feelings of self-objectification to be associated with lowered sexual self-esteem in a sample of college aged women. The current findings support prior research and also reinforce the idea that sexual self-esteem is a viable outcome of self-objectification.

Finally, internalizing states were found to significantly negatively predict behaviors in sexual situations. Previous research on the associations between internalizing states and behavior
in sexual situations is fairly limited. While several studies have found associations between body shame and behaviors in sexual situations (c.f., Bryan, Aiken, & West 1997; Gillen, Lefkowitz, & Sheraer, 2006; Schooler et al., 2005), less research can be found to support relationships between appearance anxiety or sexual self-esteem and behaviors in sexual situations. To summarize previous research, increased appearance anxiety can lead to higher engagement in risky sexual behavior (Schick, Calabrese, Rima, & Zucker, 2011), and it can be argued that anxiety about one’s appearance can lead to cognitive impairment and therefore lowered control over sexual encounters (Derakshan & Eysenck, 2009). Lowered sexual self-esteem has been found to lead to lower sexual assertiveness and less willingness to discuss contraception (Ménard & Offman, 2009; Oattes & Offman, 2007). The goal of the present study was to examine several sexual behaviors as outcomes of body shame, appearance anxiety, and sexual self-esteem, all of which are outcomes of self-objectification. Results of the current study support that these internalizing outcomes of self-objectification are occurring simultaneously to collectively predict varying behaviors in sexual situations, including sexual assertiveness, control over sexual encounters, and risky sexual behaviors. The model created in the present study is able to add to previous research by including sexual self-esteem as an internalizing outcome of self-objectification, and by creating a more complete model of self-objectification outcomes.

**Limitations and Future Directions**

Perhaps the greatest limitation to this research is the lack of causal certainty among variables. In order to determine a true timeline of events, longitudinal research methods are required. Ideally, self-objectification would be measured at one time point with internalizing states and behaviors in sexual situations being measured at later timepoints. Previous longitudinal research has found self-objectification and women’s feelings about their bodies to
vary across time. Specifically, McKinley (2006) studied women ages 20-84 and found levels of self-objectification to be highest among college-aged women, but these feelings decreased following significant life transitions (transitioning out of college and transitioning from middle age to old age). Given these prior findings, it does seem most appropriate to measure self-objectification and its consequences among college-aged women where levels of self-objectification are highest. However, research has shown self-objectification to begin occurring at a young age. Slater and Tiggemann (2002) studied self-objectification and negative outcomes in adolescent girls between the ages of 12 and 16 who were either ballet students or non-ballet students, expecting the ballet students to experience higher self-objectification and greater negative outcomes. Results found all participants to experience self-objectification regardless of context, and girls with higher self-objectification were more likely to experience body shame and appearance anxiety. Additionally, the adolescent participants scored significantly higher in self-objectification, body shame, and appearance anxiety compared to adult women (Slater & Tiggemann, 2002). In the future, research should assess for self-objectification at a younger age, perhaps in adolescence, and follow up with participants at later time points in late adolescence and emerging adulthood to measure internalizing outcomes and behaviors in sexual situations.

Additionally, as with the majority of research conducted with college samples, most participants in the present study were European American. Some research on the effects of self-objectification conducted with participants of African-American and Hispanic ethnicities has found that induced feelings of self-objectification (asking participants to try on a swimsuit with the opportunity to view their bodies in a mirror) result in negative body image regardless of ethnic background (Monro & Huon, 2005). However, other research with African-American women has been conflicting. For example, previous findings show that African-American
women tend to have higher self-esteem and more positive feelings about their bodies compared to women of other ethnicities (Twenge & Crocker, 2000). In contrast, Buchanan, Fischer, Tokar and Yoder (2008) argue that African-American women are also evaluated on an increased number of physical attributes including skin tone. Therefore, African-American women are more likely to engage in self-surveillance, particularly when it comes to monitoring their skin tone. Results of research conducted by Buchanan and colleagues found increased habitual monitoring of skin tone to predict body shame in African-American women. Further research with more diverse participant samples is needed to fully understand the effects of self-objectification among women of different ethnicities.

**Strengths and Conclusion**

While previous research studies have looked at separate outcomes of self-objectification individually, the present study was able to create a model of self-objectification outcomes which includes two major types of outcomes: internalizing outcomes and sexual behavioral outcomes. Creation of a large model such as the one for this study helps to categorize and understand outcomes of self-objectification as well as a proposed progression of outcomes. While many research studies have examined the immediate, internalizing outcomes of self-objectification (body shame and appearance anxiety), the present study was able to add to these original outcomes proposed by objectification theory by including sexual self-esteem as an internalizing outcome. This supports previous research by Calogero and Thompson (2009) who first suggested a link between self-objectification and sexual self-esteem.

Along with the addition of sexual self-esteem as an internalizing outcome of self-objectification, the present study was able to create a proposed progression of self-objectification outcomes in which internalizing outcomes of self-objectification and self-surveillance lead to
behaviors in sexual situations. Studies on self-objectification rarely address the impact of self-objectification on sexual behaviors. The majority of research on self-objectification points out how internalizing outcomes lead to later negative behaviors such as disordered eating or self-harm; fewer studies examine the impact of internalizing outcomes on sexual behaviors. Research by Franz, DeLillo, and Gervais (2015) examined how self-objectification can lower sexual assertiveness through self-surveillance. Additionally, Lustig (2012) examined the impact of self-objectification and self-surveillance on sexual functioning in women finding self-surveillance specifically during sex to be detrimental to sexual functioning.

The present study was able to add to the growing body of research on the impact of self-objectification and how internalizing outcomes of self-objectification predict how women behave in sexual situations. In accordance with Objectification Theory, it is experiences of sexualization that lead women to self-objectify in the first place (Fredrickson & Roberts, 1997), and with the sexualization of women in media and in interpersonal interactions unlikely to improve soon, it is important to understand the consequences of sexualization. Self-objectification clearly impacts women’s feelings about their bodies, an impact that often spills over into their behavior. The present study adds to the body of research which is finding that self-objectification leads to negative internalizing thoughts which impact behaviors beyond eating disorders and self-harm behaviors, but also sexual behaviors.
REFERENCES


doi:10.1080/00224499.2010.499522

doi:10.1016/j.bodyim.2005.02.003


doi:10.1111/j.1471-6402.1996.tb00467.x


