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The impact of culture on self-objectification and risky appearance management behaviors in college females: A path analytic model

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The impact of culture on self-objectification and risky appearance management
behaviors in college females: A path analytic model

Ellyn Leighton-Herrmann

A thesis project submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

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Master of Arts

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Abstract

According to objectification-theory, females are socialized to think of their bodies as objects. Given the presence of media and social influence in day to day life, these are likely to have an influence on how young adult females view their bodies. The current study specified a path model testing theoretically-based, hypothesized relationships between cultural, self-objectification, and certain appearance management behaviors in college females. As predicted, significant, positive relationships were found between the Internalization of the thin ideal and the Media, Relationship Status, and Family and Peer influence. Only two of the three hypothesized relationships between Internalization the components of McKinley and Hyde's objectified body consciousness scale were supported. In addition, the hypothesized relationships between Shame and Control and appearance management behaviors were only partially supported. The relationship between certain cultural influences (e.g., Greek Membership) and self objectification remain unclear.

Introduction

The current study examined the effects of various cultural media on the internalization of the thin ideal and subsequent self-objectification and appearance management behaviors in a sample of college females (see Figure 1). This study used McKinley and Hyde's (1996) theory of objectified body consciousness to examine self-objectification in this study, as it breaks down this large construct into smaller components (i.e., Surveillance, Shame, and Control). Self-objectification is important to study because it can have a variety of negative effects on women (e.g., disordered eating behaviors). Because young women are particularly susceptible to self-objectification, college women are a population of interest. If the impact of cultural media on self-objectification and risky behaviors in females could be determined, this information could inform proactive education on self-objectification for young adult females.

Background

Body Objectification

Our culture sexually objectifies the female body and considers it to be for the use and pleasure of others (Fredrickson & Roberts, 1997). Body objectification occurs when an outsider perceives a female's body as characterizing who she is as an individual (Fredrickson & Roberts). Objectification theory says that females are socialized to think of their bodies as objects and to internalize an observer's viewpoint of their bodies (Fredrickson & Roberts; Greenleaf & McGreer, 2006) (i.e., persistent body objectification can lead to increased levels self-objectification). Self-objectification occurs when a female internalizes this outsider's view and perceives herself as an object (McKinley & Hyde, 1996). Persistent body objectification is one of the contributing factors to self-objectification.

Objectification theory has been used to better understand the risks and consequences for females in a culture that tends to focus on physical attributes rather than personal content (Fredrickson & Roberts, 1997). Young adult women (e.g., undergraduate females) tend to feel this physical scrutiny more acutely in comparison to their older counterparts (Hall, 1984; Argyle & Williams, 1969). Increased levels of self-objectification can lead to a negative body experience for many females (i.e., poor body image, risky appearance management behaviors (McKinley & Hyde, 1996). It is hypothesized that the level of self-objectification experienced by a young female can be influenced by the type and amount of cultural media she is exposed to, as culture is a primary source of body objectification. The current study examines this hypothesis.

Culture

Many researchers contend that the ideal body shape is a product of cultural evolution (Markey, 2004; Grogan, 2007). Over the past few decades, as the shape of the average woman has increased, the idealized standard for feminine beauty has become thinner and thinner. From the middle ages until the turn of the 20th century, society viewed a woman with a voluptuous, “reproductive” figure and full stomach and hips as attractive (Grogan). It was not until the 20th century that a thin physique was paired with sexual attractiveness (Shower & Larson, 1999, Markey, 2004).

The trend toward thinness as the ideal began with the youthful, boyishness of flapper fashion in the 1920s (Grogan, 2007). To obtain the desired body shape, women began using starvation diets and engaging in intense exercise routines (Grogan). After a temporary regression to a more shapely figured in the 1950s, the trend continued downward to the “heroin chic” model favored by the fashion community in the 1990s (Grogan). Models were encouraged to appear thin and worn-out. The ideal female form

that continues to be portrayed in the media tends to be underweight, and the market for slimming and weight-loss techniques has grown exponentially (Sharps, Price-Sharps, & Hanson, 2001). The rapid expansion of media technology has increased exposure of these images to more and more women (Jackson, 1992).

Visual media. The main media through which culture is disseminated are visual media. Advertisements, television, women's magazines, and music videos are just a few of the cultural outlets that place a strong emphasis on the female body (Fredrickson & Robert, 1997). However, the ideal body images portrayed in the media are unrealistic and unobtainable for most women (Muehlenkamp & Sari-Bagalma, 2002). The pervasive input of visual media in our society has led women to believe that failure to conform to the cultural ideal will lead to ridicule related to their physical shape (Grogan, 2007; Crandall, 1994; Rothblum, 1992). Overweight individuals have been described as less intelligent, successful, and popular, as well as deserving of ridicule (Grogan). Women face this negative stereotyping more often than men (Grogan); therefore, they feel more pressure to conform to the societal ideal. Pressure to conform to the thin ideal leads to further internalization of the ideal. The internalization of the ideal can lead to increased self-objectification (Morry & Satska, 2001)

Media awareness. Media awareness is an important component of the sociocultural pressure to obtain the thin-ideal (Stice, 2002). Daily contact with the images of attractive and thin models used in advertisements raises the standards against which young women may judge themselves (Rudd & Lennon, 2000). Exposure to media containing idealized images of thin physiques, airbrushed features, and rail-thin models can engender negative feelings in the viewer, manifesting in undergraduate females as shame, stress, insecurity, and body dissatisfaction (Rudd & Lennon). When women look

to this type of media for information on how they should look and dress, it can lead to further negative consequences.

Family and peers. Another major medium for culture is our social environment. Sociocultural pressures (e.g., family members, peers) are significant risk factors for body dissatisfaction and the encouragement of the thin ideal (Stice, 2002; Heinberg, 1996; Silberstein, Striegel-Moore; Rodin, 1987). Specifically, the mother-daughter bond is a strong influence on the shaping of a girl's body image (Benedikt, Wertheim, & Love, 1998; Cook, 2002; Motley, 1997). Using a sample of 116 college females and 76 of their middle-aged mothers Liechty, Freeman, and Zabriskie (2006) examined the relationship between the body image and appearance beliefs of mothers and their daughters. Simple correlations indicated that maternal beliefs are related to the daughters' beliefs.

Greek membership. A female's image of her body is malleable, and can be easily changed when exposed to new information. This image is, to a large extent, influenced by her social experiences (Grogan, 2007). Basow, Foran, and Bookwala (2007) conducted a study looking at the relationship between 265 Greek and non-Greek college females, and self-objectification and disordered eating. They assessed self-objectification using McKinley and Hyde's (1996) Objectified Body Consciousness Scale. Correlational results suggest that sororities not only attract at-risk women, but living in a sorority house was associated with increased likelihood of disordered eating. Greek women and women that intended to become Greek scored higher on self-objectification and disordered eating symptoms than those not planning to become Greek.

Relationship status. Evolutionary theorists have suggested that the roots of objectification may be embedded in the mate selection process. Reproductive viability is an important component of mate selection. Therefore, physical attractiveness is an

important component of the process (Sanchez & Broccoli, 2008), as it is indirectly related to a woman's reproductive worth (Fredrickson & Roberts, 1997). Unger (1979) contends that physical attractiveness for women equals power; therefore, the principal currency for social and economic achievement is beauty and a slim body form. Various studies suggest that overweight females were less likely to be in a relationship than their peers (e.g., Sheets & Ajmere, 2005). The pursuit of relationships is regularly associated with unrealistic images of female beauty leading to a potential automatic link between self-objectification and thoughts about relationships (Sanchez & Broccoli, 2008). Meyer and Schvaneveldt (1971) proposed the theory of contiguous activation which contends, "...that frequently paired knowledge structures (e.g., relationships and beauty) become automatized over time and eventually evolve to activate one another" (from Sanchez & Broccoli).

People are susceptible to struggling for the ideal physique in order to obtain, or even maintain, a romantic relationship (Sanchez, Good, Kwang, & Saltzman, 2008). Sanchez and Broccoli (2008) also found that single college females showed increased self-objectification after relationship priming, in contrast to college females in relationships. Deriving self-worth from relationship status has been linked to body-shame; however this relationship has been mediated by mate urgency (Sanchez, Good, Kwang, & Saltzman). That particular study also found that as the urgency to find a mate increases, so does the urge to obtain the ideal body shape. It is hypothesized that in an environment in which mate selection is more competitive for females, single females may be more likely to put more emphasis upon their relationship status and the pursuit for a relationship. As a result, they may be more likely to internalize the outsider's view of themselves, and self-objectify. However, if the female is already in a relationship, she

may not be as affected. This study will look further into the role of relationship status on self-objectification.

Thin Ideal Internalization

Internalization involves the incorporation of the societal ideal of feminine attractiveness to the extent that it becomes one of the guiding principles in day to day decision making (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). In other words, the societal ideal controls choices regarding what to wear, what to eat, and/or how much to exercise. As stated earlier, the visual and social media are largely responsible for the emphasis on the societal ideal. In a study of 150 undergraduate men and women, results from multiple regression analyses suggest that reading beauty magazines predicted self-objectification in females, and internalization mediated this relationship (Morry & Staska, 2001). Internalization causes women to believe their body needs to look a certain way in order to be both socially and economically successful and desirable, leading to a preoccupation with changing their bodies to meet this cultural standard (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). The internalization of the ideal images a female sees in the media will lead her to believe she is less than desirable if she does not meet these unrealistic body images (Thompson, van den Berg, Roehrig, Guarda, & Heinberg).

McKinley and Hyde's Objectified Body Consciousness

As noted above, it is believed that culture impacts self-objectification directly and indirectly via internalization of the thin ideal (Figure 1). McKinley and Hyde (1996) developed the concept of *objectified body consciousness* (OBC) to better understand the phenomenon of self-objectification and its impact on the female body experience. OBC breaks down the concept of self-objectification into three smaller, easier to comprehend

components: (1) body surveillance, (2) body shame, and (3) beliefs about appearance control.

Body surveillance. According to the principle of body surveillance, a fundamental component of OBC, the female body is constructed as an entity to be looked at and desired (McKinley & Hyde, 1996). Due to the pressure of persistent looks from others, females develop the action of self-surveillance. Self-surveillance is the process of a female viewing herself as she perceives that others do. This action is essential in order for a female to decrease the chance of negative judgment from others for not conforming to cultural standards (McKinley & Hyde). Being aware of how they appear to others enables females to try to compensate for any discrepancy between their perceived image and the perceived body ideal.

Body shame. Many females use the societal standard for the ideal feminine physique as a point of comparison when viewing their bodies. A female's willingness to strive for this unrealistic standard will become more dominant when she internalizes the societal ideal and adopts the standard as her own, not just that of society (McKinley & Hyde, 1996). The extent to which a woman internalizes the cultural ideal is related to the amount of shame she feels (Bartky, 1988). The process of internalization, incorporating the societal ideal of beauty to the extent that it becomes one of the guiding principles in day to day decision making, can lead to feelings of severe shame when the woman is unable to meet the internalized standard (McKinley & Hyde, 1996). She can characterize this as a "failure" within herself. When a female fails to meet her internalized expectations, the sense of shame is magnified in comparison to failure of expectations that the female does not identify with (McKinley & Hyde).

Responsibility for appearance: Control beliefs. In general, our culture holds

individuals accountable for their own fates, including their physical appearance (Grogan, 2007). The third component of McKinley and Hyde's (1996) OBC theory is a woman's feeling of responsibility over her personal appearance. Given enough time and effort, women come to believe they can control their appearance and change it to meet the unrealistic cultural ideal. In other words, if a female wants to look a certain way, she can take the necessary actions to make it happen. Believing they can control their appearance is what enables women to accept the cultural standard as a realistic and achievable image.

Consequences of Objectified Body Consciousness

Positive consequences of objectified body consciousness. Self-objectification has been associated with some positive benefits. It is important to note that these benefits are only seen when the level of self-objectification is low. Occasional self-surveillance has been associated with individual achievement, health, and self-love. Appearance-control beliefs can be empowering, and promote a better sense of well-being. This feeling of control can help alleviate some of the stress brought on by surveillance and internalization. The women experiencing these positive consequences believe they have the ability to create positive change, and feel less shame when they do not match the image to which they compare themselves (McKinley & Hyde, 1996).

Negative consequence of objectified body consciousness. Persistent self-objectification, viewing oneself as she perceives other do, can result in harmful consequences (McKinley & Hyde, 1996; Fredrickson & Roberts, 1998). People are aware of standards set by their culture, and focus their attention on comparing themselves to these standards to limit the amount of inconsistency between the two. If a person is unable to limit the amount of discrepancy, negative feelings about her body may develop (Carver & Scheier, 1981).

Self-objectification was related to disordered eating attitudes and behaviors in a sample of 185 undergraduate females (Greenleaf & McGreer, 2006). Many undergraduate females also believe the cultural ideal for beauty can be achieved with time and effort (Rudd & Lennon, 2000). This can lead to unhealthy appearance management behaviors in an attempt to achieve the cultural ideal. Restricted eating is a common unhealthy appearance management behavior, and the inevitable regaining of weight can cause a recurring cycle of health related issues (Ernsberger & Haskew, 1987). In addition to physical health issues, negative appearance-management behavior can also affect a person's cognitive and emotional health.

Appearance management behaviors. College women that report feelings of body dissatisfaction also report the internalization of the cultural standard (Greenleaf & McGreer, 2006). In addition to these women embracing the cultural "ideal," these researchers found that many also practice various appearance-management behaviors. The most unfortunate aspect of this finding is that most of these behaviors are associated with a certain level of risk (e.g., disordered eating, excessive exercise, tanning, and/or smoking).

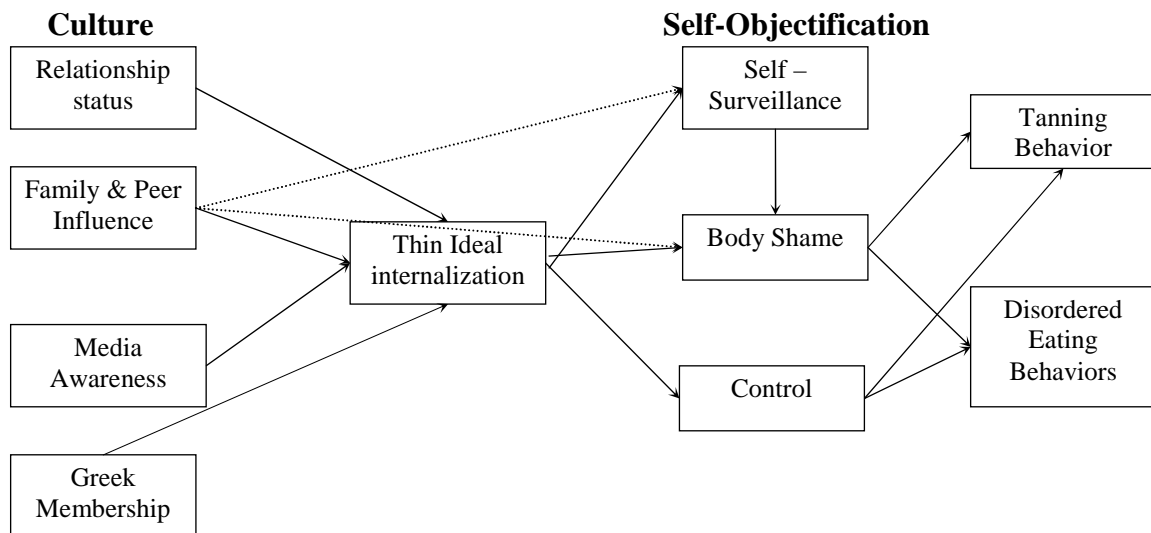
Over half of college women have skipped meals (Tylka & Subich, 2002). Approximately one third have restricted calorie intake, eliminated fats and carbohydrates (Tylka & Subich). About one fourth of college females have fasted for more than 24 hours (Tylka & Subich). Approximately 40%-45% of girls and young women, at any given time, are using various methods to attempt weight loss; often motivated by some level of body dissatisfaction (Piran & Cormier, 2005). An estimated 10% of females will have some form of a diagnosable eating disorder in their lifetime (Stice, Telch & Rizvi, 2000). Although this proportion may seem small, this is merely a sub-set of a larger

spectrum of eating behaviors that, while not meeting diagnostic criteria for an eating disorder, still result in significant impairment.

Appearance management behaviors go beyond dieting practices. Other appearance management behaviors include hair coloring, manicures and pedicures, tattoos, piercings, make-up application, exercise, and plastic surgery. According to Strelan, Mehaffey, and Tiggemann (2003), women that scored higher on a self-objectification measure were less likely to work out for health related reasons and were motivated more by appearance. Women like this, are also more likely to over-exercise. The current study examines the effects of self-objectification on two specific appearance management behaviors, tanning and disordered eating.

Current Study

Figure 1. Theoretical model of self-objectification and appearance management behavior



Note. The dashed line indicates the additional direct relationships that are specified in Model 2, but not Model 1.

df (Model 1)=27 and df (Model 2) =25

A Path Analytic Model of Self-Objectification

Previous studies have examined components of the current model. However, no previous research has tested the complete path model. This is the first time that all of these variables have been integrated into one model and analyzed.

Hypotheses

Media awareness, internalization, and self-objectification. There is a direct link between Media Awareness and Internalization of the thin ideal (Myers & Crowther, 2004). Specifically, the more a woman looks to the media as a source of information regarding body type and fashion, the more likely it is that she will internalize what she is seeing. Internalizing the thin ideal can cause women to believe their bodies need to mimic the thin images in the media, leading to a preoccupation with changing their bodies to meet this perceived cultural standard (e.g., Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Myers and Crowther (2004) found that internalization

significantly mediated the relationship between Media Awareness and self-objectification. Theoretically, a fully mediated relationship is supported; the relationship between media and self-objectification is mediated by internalization because if a woman is not internalizing the thin ideal portrayed in the media, the media will not have an impact on self-objectification.

Hypothesis 1. Females reporting greater levels of Media Awareness will also report greater levels of Internalization of the thin ideal.

Hypothesis 2. The extent to which the female internalizes the societal ideal will mediate the influence of Media Awareness on her level of self-objectification; thereby, influencing the three components of OBC which represent self-objectification as proposed in the model.

Family and peer influence and internalization. Another external, sociocultural pressure to conform to the thin-ideal is our social environment (e.g., family and peers). Family and peers can play an integral role in appearance belief development by encouraging the thin-ideal (Heinberg, 1996; Silberstein, Striegel-Moore, & Rodin, 1987). Myers and Crowther (2007) did not find a significant link between social influence and thin ideal internalization. However, they also had a sample of less than 200. Theoretically, unless a female internalizes the information being presented to her in her social environment, it is not as likely to have an impact on self-objectification. Therefore, Model 1 proposes a direct path between Family and Peer Influence and Internalization. Internalization will mediate the relationship between social influence and self-objectification. To further examine the findings of Myers and Crowther, Model 2 differs from Model 1 in that it contains a direct relationship between Family and Peer Influence and two components of self-objectification (Surveillance and Body Shame), which

represents a partially mediated relationship (mediated by Internalization).

Hypothesis 3. Family and Peer Influence will be directly related to Internalization, and indirectly related to two of the three components of OBC which represent self-objectification as proposed in the model (Surveillance and Body Shame).

Hypothesis 4. Family and Peer Influence will be directly related to two of the three components of OBC (Surveillance and Body Shame), and this relationship will be partially mediated by Internalization. Theoretically, Family and Peer Influence will not be related to control, as control is not strongly correlated with Surveillance or Body Shame.

Greek membership and internalization. Basow, Foran, and Bookwala (2007) examined the relationship between Greek membership and disordered eating, by assessing self-objectification and social pressure in non-sorority members, sorority members, and women who plan to join a sorority. The researchers found that sororities not only attract at-risk women, but living in a sorority house was associated with the increased likelihood of disordered eating. As being in a sorority is an additional external, sociocultural pressure to conform to the thin-ideal, then the internalization of the pressured ideal could in turn effect self-objectification.

Hypothesis 5. Sorority membership will be associated with increased levels of self-objectification via an indirect effect through Internalization.

Relationship status and internalization. The pursuit of relationships is regularly coupled with unrealistic images of female beauty, leading to a potential automatic link between self-objectification and thoughts about relationships (Sanchez & Broccoli, 2008). Deriving self-worth from relationship status has been linked to body-shame;

however, this relationship has been mediated by mate urgency (Sanchez, Good, Kwang, & Saltzman, 2008). That particular study also found that as the urgency to find a mate increases, so does the urge to obtain the ideal body shape. It is possible that in an environment where mate selection is more competitive for females, single females may be more likely to think about their relationship status and the pursuit for a relationship. As a result, they may be more likely to internalize and adopt an outsider's view of themselves, and then self-objectify.

Hypothesis 6. It is hypothesized that being single will be associated with higher levels of self-objectification; thereby, influencing the three components of OBC which represent self-objectification as proposed in the model. This relationship will be fully mediated by the Internalization of the thin-ideal because a female will internalize the ideal of beauty that is associated with finding a partner.

Internalization, body surveillance, body shame, and appearance

management behaviors. Internalization of the thin ideal is related to disordered eating attitudes and behaviors (Greenleaf & McGreer, 2006). This relationship is mediated by the shame and appearance anxiety resulting from surveillance. The extent to which a woman internalizes the cultural ideal is related to the amount of shame she feels (Bartky, 1988). When a female fails to meet her internalized expectations, the sense of shame is magnified in comparison to failure of expectations that the female does not identify with (McKinley & Hyde).

Hypothesis 7. Internalization will be directly related to Body Shame and Surveillance.

Hypothesis 8. Internalization will also be indirectly related to levels of

Body Shame via Surveillance.

Hypothesis 9. Body Shame will be directly related to the occurrence of Appearance management behaviors.

Internalization, control, and appearance management behaviors. Control is an underlying assumption on which the rest of OBC is based (Wolf, 1991). Some women believe that they can control their appearance (McKinley & Hyde, 1996). Internalizing the achievement of the cultural standard as a choice further promotes the appearance-control beliefs. If a woman believes she can control her appearance, she will be more likely to engage in appearance management behaviors.

Hypothesis 10. Internalization will be directly related to Control.

Hypothesis 11. Control will be related to the occurrence of Appearance management behaviors.

Methods

Participants

Four-hundred seventy-eight female, undergraduate students attended an in-person session and completed a questionnaire packet for course credit. The final usable sample was 463. The age of participants ranged from 18 to 22.

Measures

FFS. The Family and Friends Scale (FFS; Myers & Crowther, 2007) consists of 20 items that assess the influence of family and peers. The measure examines the extent to which each person (Mother, Father, Siblings, and Peers) is concerned with her or his own appearance, and has encouraged the participant to be concerned with her appearance. Responses range from Strongly Agree (1) to Strongly Disagree (4). A sub-total was calculated for family and peers individually, an average was determined for each sub-total, and the two averages were summed to form an FFS total score. Means were used, as opposed to an overall total score, to account for individuals that only had one parent and/or no siblings. Scores could range from 2 to 10. The validity of this measure has yet to be studied. However, the current study found that the FFS composite had acceptable reliability ($\alpha=.87$)

SATAQ-3. The Sociocultural Attitudes Towards Appearance Scale -3 (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004) measures the influence of visual media using Strongly Disagree (1) to Strongly Agree (5) scale. Factor analyses revealed two discrete internalization factors; an Internalization-General media influence factor and an Internalization-Athletic figures factor (Thompson, van den Berg, Roehrig, Guarda, & Heinberg). Two additional factors, Pressure from the media and the role of media as an Information source, were also found (Thompson, van den Berg, Roehrig,

Guarda, & Heinberg). This study used the Internalization-General subscale to measure Internalization of the thin ideal. The Information subscale measured Media Awareness. This subscale examined the extent to which the female looks to the media as a source of information regarding fashion and beauty. A total score was calculated for each subscale, with possible scores ranging from 9 to 63 for each. All of the subscales are associated with acceptable convergent validity with various measures of disordered eating behaviors and body image (Thompson, van den Berg, Roehrig, Guarda, & Heinberg). The two subscales of interest were associated with the following reliability values, Information (.90), Internalization-General (.90) in the current study.

OBCS. The Objectified Body Consciousness Scale (McKinle & Hyde, 1996) consists of three subscales and a total of 24 items using a Strongly Disagree (1) to Strongly Agree (7) scale. Scores on each subscale range from 7 to 56. The three subscales include surveillance, body shame, and appearance control beliefs, based upon the three main principles of OBC. The Surveillance subscale asked questions related to viewing the body as an outside observer. The Body shame subscale related to feeling shame when the body does not conform to the societal ideal. The appearance control beliefs subscale pertained to the belief that a person has the ability to control and adapt their body to the social ideal. A total score was calculated for each subscale. Higher scores indicate and increased level of self-objectification. Validation research indicated acceptable construct validity for the all three subscales (McKinley & Hyde). In addition, all three subscales were associated with acceptable reliability in the current study (Surveillance $\alpha=.80$, Body Shame $\alpha=.84$, and Control $\alpha=.74$).

EDDS. The Eating Disorder Diagnostic Scale (EDDS) (Stice et al., 2000) is a 22-item self-report questionnaire that assesses the presence of DSM-IV defined eating

Table 1. *Analyzed correlation matrix.*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Media Awareness	1													
2. Family &Peers	.21**	1												
3. Relationship	.11*	.13**	1											
4. Greek Membership	.09	-.03	-.02	1										
5. Internalization	.60**	.29**	.15**	.06	1									
6. Surveillance	.43**	.24**	.12*	.00	.63**	1								
7. Shame	.25**	.37**	.16*	-.02	.44**	.42**	1							
8. Control	-.06	.02	-.06	-.01	-.05	.02	-.08	1						
9. Tanning	.13**	.14**	-.01	.09	.15**	.15**	.08	.04	1					
10. Disordered Eating	.17**	.23**	.06	-.04	.30**	.22**	.44**	.01		1				
11. Purging	.14**	.16**	.08	-.03	.21**	.16**	.23**	-.05	.11*	.50**	1			
12. Diet Pills	.11*	.11*	.05	-.06	.19**	.14**	.26**	.00	.11*	.59**	.24**	1		
13. Fasting	.14**	.16**	-.01	.01	.26**	.24**	.38**	.03	.06	.78**	.30**	.32**	1	
14. Exercise	.10*	.21**	.08	-.05	.21**	.10*	.33**	.01	.13**	.83**	.25**	.30**	.43**	1

* indicates $p < .05$

** indicates $p < .01$

disorders (anorexia nervosa, bulimia nervosa, and binge eating disorder). Validation research has indicated acceptable criterion, convergent, and predictive validity for the EDDS, as well as acceptable reliability ($\alpha = .89$) (Stice, Fisher, Martinez, 2004). It consists of a combination of items, including frequency, write-in response, and yes-no formats. However, only four of the items were used in the current study. For the purposes of this study, the EDDS assessed the frequency of four disordered eating behaviors (purging, excessive exercise, fasting, and diet pill usage) along a 14-point scale (i.e., “How many times per week on average...?”). All four behaviors were significantly correlated (Table 1); therefore, they were summed to form a total score representing the frequency of disordered eating behaviors. Scores could range from 0 to 52.

Lifestyle Characteristics Questionnaire. Each participant completed a questionnaire created for this study that contained a series of lifestyle-related questions. Data regarding age, media consumption, lifestyle characteristics, and various appearance

management behaviors were collected. Participants responded to questions regarding Greek Membership, Relationship Status, and Tanning Behavior. The number of times a participant used a tanning bed each month indicated the frequency of Tanning Behavior.

Results

Descriptives

Skewness and kurtosis information provided for all the continuous variables in Table 2 indicated relatively normal data, except for the Disordered Eating variable which was both positively skewed (>2) and kurtotic (>7). These values could cause estimation problems (e.g., Chou & Bentler, 1995; Curran, West, & Finch, 1996; Muthén & Kaplan, 1985). In addition, Mardia's standardized value for multivariate kurtosis was 8.73. A standardized Mardia's value greater than 3 could produce inaccurate results (Bentler & Wu, 2003). All of the continuous variables, except Disordered Eating, had means that were right around the midpoint of the scale. There were no ceiling or floor effects for any of these variables. However, a floor effect was found for the Disordered Eating variable, with the mean score hovering around the bottom of the scale. This indicates that many of the participants were reporting low frequencies of the disordered eating behaviors.

Due to the non-normal data, this study used Maximum-Likelihood (ML) with the Satorra-Bentler (SB) adjustment in LISREL 8.72 (Jöreskog & Sörbom, 2005) to estimate the fit of two theoretical models representing the hypothesized relationships between culture, self-objectification, and appearance management behaviors. ML performs better than the other normal-theory estimators (e.g., Generalized Least Squares) because it is sensitive to model misspecification. The SB adjustment aided in accounting for the multivariate non-normality.

Both of the categorical variables, Greek Membership and Relationship Status (Table 3), were collapsed from three levels down to two levels due to sample size issues and lack of differences between particular levels of the categorical variables. For

Table 2. *Descriptive statistics for continuous variables.*

	Min	Max	M	SD	Skewness	Kurtosis
Media Awareness	9.00	45.00	28.37	7.64	-0.28	-0.46
Family & Peers	2.00	7.60	4.50	1.01	0.14	-0.34
Internalization	9.00	45.00	30.41	7.77	-0.47	-0.35
Surveillance	15.00	56.00	39.74	7.38	-0.58	0.14
Shame	8.00	56.00	27.25	9.63	0.25	-0.65
Control	14.00	56.00	39.09	7.13	-0.12	-0.23
Tanning	0.00	4.00	0.730	1.06	1.59	1.91
Disordered Eating	0.00	38.00	3.05	5.59	2.86	10.10

Table 3. *Descriptive statistics for categorical variables.*

	N
Relationship Status	463
Yes	208
No	176
No, but actively looking	79
Greek Membership	463
Yes	58
No, but intend to join	25
No	380

the levels of Greek Membership on Internalization. Results indicated that females in a sorority significantly differed on Internalization in comparison to those not in a sorority. However, those not in a sorority did not differ significantly from participants who were not in a sorority, but intended to join. Therefore, these two groups (i.e., “No” and “No, but intend to join”) were collapsed. A response of “No” or “No, but intend to join” was coded “0,” and a “Yes” response was coded 1.

When asked if in a relationship, participants had to answer either “Yes,” “No,” or “No, but actively looking.” ANOVA results indicated that females in a relationship significantly differed on Internalization in comparison to their single peers (i.e., those that answered either “No,” or “No, but actively looking”). However, single females did not significantly differ on Internalization depending on whether or not they were actively pursuing a relationship. In addition, the wording that distinguished these two groups was vague. It was possible that the participants could have been looking whether or not they answered as such. Therefore, these two groups (i.e., “No” and “No, but actively looking”)

were also collapsed. A “Yes” response was coded “0,” and a No,” or “No, but actively looking” response was coded “1”

Bivariate relationships

The simple bivariate correlations presented in Table 1 (above) foreshadow the fit and magnitude of parameter estimates for Models 1 and 2. The magnitude of some correlations did not align with the *a priori* hypotheses, whereas some did. For example, the correlations between Greek Membership and the other variables in the model were low and non-significant, indicating that, contrary to predictions, Greek Membership does not have much of a relationship with any of the other variables in the model. Relationship Status, Media Awareness and Family and Peer Influence were significantly correlated with Internalization, as predicted. As these relationships were relatively moderate in size, it was expected that these predictors would be significantly related to Internalization in the models.

Internalization was significantly correlated with two of the three component of self-objectification. This is contrary to the *a priori* hypotheses, which stated that Internalization should be related to all three. Internalization was only significantly related to Surveillance and Body Shame. These relationships were moderate to strong, which indicates they may be significant in the models.

None of the correlations between Control and the other variables in the model were significant. This will result in low, non-significant relationships in the path model; which is contrary to the hypothesized direct relationships with Internalization and appearance management behaviors, and the indirect relationship with the various cultural influences. Body Shame was moderately correlated to Disordered Eating, as predicted. However, it was not correlated with Tanning Behavior.

Model Fit Indices

The X^2 tests an exact hypothesis of whether or not the model fits the data; however, it is influenced by sample size. As a result, two Goodness-of-Fit Indices (GFIs) were computed in addition to the X^2 test to evaluate the overall fit of each model (Hu & Bentler, 1998). It was important to use at least one absolute GFI and one incremental GFI. An absolute fit index describes the fit of the model to a covariance matrix and it is not calculated relative to the fit of another model. An incremental fit index estimates model fit relative to a baseline model. In LISREL, this baseline model is a null model (assumes no relationships among variables).

The following GFIs were used in addition to X^2 to assess model fit: Standardized Root Mean Residual (SRMR), and Comparative Fit Index (CFI). When data is non-normal, Yu and Muthén (2002) suggest a CFI_{SB} of at least .95. They also recommend a SRMR cutoff of .07 since the SB adjustment does not adjust the SRMR like it does the CFI. It is important to note that Marsh et al. (2004) caution that these cutoffs are only suggestions, and thus are not used to make the final decision of fit for the model.

Since the SRMR represents the average discrepancy between the actual and reproduced matrices and both GFIs mentioned above only give a global idea of how well the model fits, it was important to look at the discrepancy between individual observed and model-implied relationships as well. A model can appear to have good overall fit while containing areas of significant local misfit. Standardized covariance residuals represent the discrepancy between the actual covariance values and the reproduced covariance values. Residuals greater than |3| are considered large (Byrne, 1998). High positive residuals indicate a large amount of shared variance between two variables was left unexplained by the model (i.e., the model is not estimating the relationship well).

Model 1. The fit indices reported in Table 4 indicate that Model 1 had relatively good fit overall. The SRMR was below .07. However, the CFI was just shy of .95 and the X^2 was significant. However, there were some local areas of misfit. Specifically, there were four areas of minor local misfit, in which the standardized covariance residuals (Table 5) were over the suggested cut-off of 3.00. As expected, the largest residual was associated with the relationship between Family and Peer Influence and Body Shame. The positive residual indicates that Model 1 underestimates this relationship. Recall, this was the additional relationship that was added to Model 2. This indicates this path is necessary to adequately represent the relationship between Family and Peer Influence and Body Shame; the relationship is not fully mediated. Secondly, there was minor misfit

Table 4. *Chi-square and Goodness of Fit indices for each*

Model	X^2_{SB}	df	ΔX^2_{SB}	Δdf_{SB}	p-value	SRMR	CFI _{SB}
Model 1	89.00	27	---	---	---	0.06	0.93
Model 2	57.69	25	18.61	2	<0.01	0.05	0.97
Post Hoc	43.73	21	---	---	---	0.04	0.98

_{SB} indicates values based on the Satorra-Bentler adjustment

Table 5. *Standardized covariance residuals for Model 1 and Model 2*

	1	2	3	4	5	6	7	8	9	10
1. Media Awareness	-- (--)									
2. Family & Peer Influence	-- (--)	-- (--)								
3. Greek Membership	-- (--)	-- (--)	-- (--)							
4. Relationship Status	-- (--)	-- (--)	-- (--)	-- (--)						
5. Internalization	-- (--)	0.00 (0.00)	-- (--)	-- (--)	-- (--)					
6. Surveillance	1.55 (1.50)	1.48 (--)	1.16 (1.17)	.72 (.58)	0.00 (--)	0.00 (0.00)				
7. Body Shame	-.033 (-.63)	6.02 (--)	-0.8 (-.20)	2.14 (1.72)	-- (--)	-- (--)	-- (--)			
8. Control	-.74 (-.74)	.80 (.80)	-.20 (-.20)	-1.08 (-1.08)	-- (0.00)	1.41 (1.41)	-1.33 (-1.33)	-- (--)		
9. Tanning	2.54 (2.53)	2.81 (2.59)	2.55 (2.55)	-.31 (-.35)	3.20 (3.20)	3.20 (3.20)	-- (--)	-- (--)	-.01 (-.01)	
10. Disordered Eating	.86 (.79)	3.09 (1.30)	-1.47 (-1.42)	.68 (.48)	2.33 (2.33)	.82 (.82)	-.05 (-.05)	-.95 (-.95)	2.01 (2.01)	-.01 (-.01)

Note. Values outside the parentheses represent the standardized covariance residuals for Model 1.

Values inside the parentheses represent the standardized covariance residuals for Model 2.

between Family and Peer Influence and Disordered Eating. This was also not surprising, since Body Shame mediates this underestimated relationship. That is, once the addition path between Family and Peer Influence and Body Shame is added in, there is another route to Disordered Eating. Finally, there was local misfit involving the relationships between Internalization and Surveillance, and Tanning Behavior. As the bivariate correlations foreshadowed, there was more of a relationship between these variables than was specified by Model 1. The positive standardized residuals represented this underestimation.

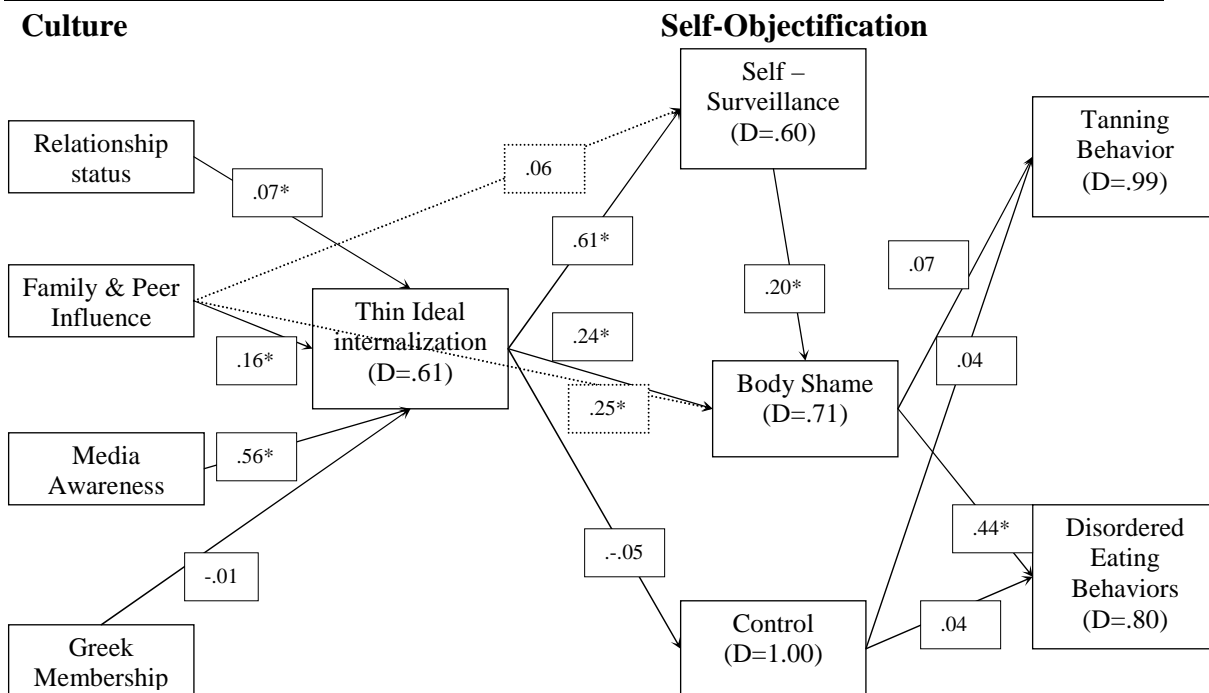
In addition to areas of misfit, there were a few areas that lacked the hypothesized significant parameter estimates. Greek Membership did not have a significant relationship with Internalization. None of the specified relationships involving the Control variable were found to be significant.

Model 2. As anticipated, Model 2 fit better than Model 1. More importantly, the ΔX^2 (Table 4) suggests the addition of two paths (one from Family and Peers to Body Shame and one from Family and Peers to Surveillance) resulted in a significantly better fitting model. This increase in fit can be attributed to the additional direct path from Family and Peers to Body Shame because this path was significant, unlike the path between Family and Peers and Surveillance. Despite the X^2 being significant, both the SRMR and CFI were acceptable and met suggested cutoff values. The highest standardized covariance residual after the addition of the extra path decreased to near zero. In addition, the residual representing the relationship between Disordered Eating and Family and Peers also decreased. Body Shame mediated this path, which helped account for some of the unexplained variance. The additional path to Surveillance from Family and Peers was not significant; however, this was not surprising considering there

was not a high standardized residual for this relationship in Model 1. It is important to note that two of the residuals over 3.0 from Model 1 remained even after adding these two additional paths. That is, the relationship between Internalization and Surveillance and Tanning were unaffected by the addition of these paths. Since this model has acceptable fit, the parameter estimates were further interpreted (Table 7).

Direct effects. The estimated direct effects are presented in Figure 2 and Table 7. Roughly half of the estimated direct relationships reproduced significant effects. Contrary to prediction, there was not a significant direct relationship between Greek Membership and Internalization. However, there were significant direct effects between Internalization and the following: Relationship Status, Media Awareness, and Family and Peers. Recall, Relationship Status was coded “1” for those not in a relationship and “0” for those in a

Figure 2. Standardized path coefficients (parameter estimates) for Model 2



N=463 and $df=25$

Note: All exogenous variables were allowed to correlate.

* Indicates a significant path

(D=) indicates the standardized disturbance term for each variable

Table 6. Model 2 standardized direct and indirect effects (path coefficients)

	Media	Family & Peers	Greek	Relationship Status	Internalization	Surveillance	Shame	Control
Internalization	.56*	.16*	.00	.07*	--			
Surveillance	(.34*)	.06 (.10*)	(-.01)	(.04)*	.61*	--		
Body Shame	(.20*)	.25* (.07*)	(.00)	(.03)*	.24* (.12*)	.20*	--	
Control	(-.03)	(-.01)	(.00)	(.00)	-.05	--	--	--
Tanning	(.01)	(.02)	(.00)	(.00)	(.03)	(.02)	.07	.04
Disordered Eating	(.09*)	(.14*)	(.00)	(.01)	(.16*)	(.09*)	.44*	.04

Note. Values outside the parentheses represent the standardized direct effects.

Values inside the parentheses represent the standardized indirect effects.

* Indicates a significant effect

relationship, thus indicating that those not in a relationship were higher on internalization. Family and Peer Influence was significantly related to Body Shame; however, the path to hypothesis, none of the indirect relationships involving Greek Membership were significant.

Relationship Status and Media Awareness were significantly, indirectly related to Surveillance and Body Shame. These relationships were fully mediated via Internalization, as predicted. Media Awareness, but not Relationship Status, was also indirectly related to Disordered Eating, and this relationship was fully mediated via Internalization, Surveillance, and Body Shame. Neither Relationship Status nor Media Awareness were significantly, indirectly related to Tanning.

Although Model 2 specified, but did not produce, a significant direct relationship between Family and Peer Influence and Surveillance, these two variables did have a significant indirect relationship, via Internalization. There was also an indirect relationship between Family and Peer Influence and Body Shame. Therefore, the relationship between Family and Peers and Body Shame was partially mediated via Internalization and Surveillance. Family and Peer Influence did not have significant

indirect relationships with Control or Tanning; however, it did have a significant indirect effect with Disordered Eating.

There was a significant indirect effect between Internalization and Body Shame via Surveillance. Since Internalization and Body Shame also had a significant direct relationship, Surveillance only partially mediated the relationship between Internalization and Body Shame. The fully mediated relationship between Internalization and Disordered Eating was also significant; however, the same did not hold true for the indirect effect between Internalization and Tanning. Surveillance had a significant indirect effect with Disordered Eating via Body Shame. However, there was not a significant indirect relationship between Surveillance and Tanning Behavior via Body Shame.

Variance explained. The disturbance terms for each of the endogenous variables are also presented in Figure 2. The disturbance term indicates the amount of variance in the variable left unexplained by the model. Therefore, 1-D represents the amount of variance that is explained. Almost 40% of variance in Internalization was explained by the specified cultural variables. The majority of the variance was accounted for by Media Awareness, as is evident by the large standardized parameter estimate (also in Figure 2).

Internalization and Surveillance explained 40% of the variance in Shame. This is a significant amount of variance to be explained in any one variable. Even with control doing nothing (as evidenced by the low, non-significant parameter estimate), this model still explained 20% of the variance in disordered eating behaviors with only one significant path from Shame. The high disturbance terms of Control and Tanning indicate that the model is not explaining anything in these two variables.

Appearance management behaviors. Neither Body Shame nor Control successfully predicted Tanning Behavior (both direct paths were non-significant in

Models 1 and 2). However, the standardized covariance residuals from both models indicated a potential relationship between Tanning and Surveillance and Tanning and Internalization, and Tanning Behavior, as they were both over 3.00. This indicates that there is some shared variance between these variables that was not explained by Model 2. Control also did not significantly relate to Disordered Eating; however, Shame did. There was a significant direct relationship between Shame and Disordered Eating as hypothesized.

Discussion

Given the myriad consequences that can result from persistent self-objectification, it was important to examine potential contributing factors and resulting consequences. As culture is unavoidable, this medium of influence is of particular interest. The current study estimated a model of culture, self-objectification, and appearance management behaviors that had never been examined. It combined various sociocultural factors pertinent to college females, and examined how they all impact self-objectification and subsequent risky appearance management behaviors. While previous research has examined parts of the current model, this study attempted to examine a bigger picture. This information can hopefully be used to inform individuals of the risks associated with the pressure to conform to the thin-ideal, as well as develop educational and awareness programs on college campus.

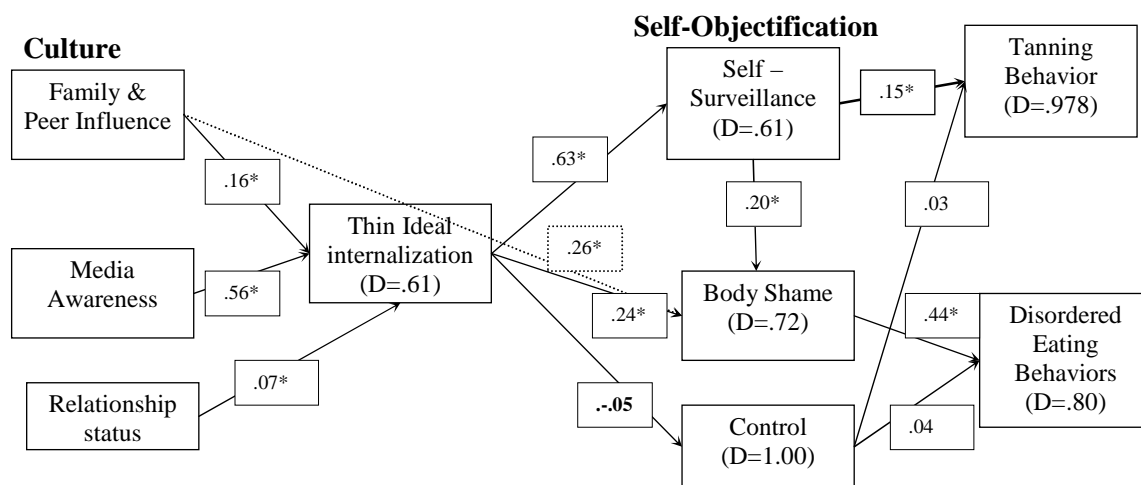
As the results indicated, Model 2 fit better than Model 1. Model 2 contained the additional paths between Family and Peer Influence and two components of self-objectification (Surveillance and Body Shame). The evidence from Model 2 suggests that Media Awareness and Relationship Status were indirectly related to Self-objectification via Internalization of the thin idea. These results aligned with the theoretically-based hypotheses. In addition, as hypothesized in Model 2, the partially mediated relationship between Family and Peer Influence and the Body Shame component of self-objectification was significant. Internalization related to Surveillance and Body Shame, but not to Control. As hypothesized, increased feelings of Body Shame were related to an increased frequency of Disordered Eating behaviors (e.g., diet pills, purging, fasting, and excessive exercise).

Post hoc model

There were two minor areas of misfit in Model 2 (residuals slightly over 3.00). The residuals indicated that the relationship between Surveillance and Tanning and between Internalization and Tanning were not represented well by the model. Based on the results from Models 1 and 2, a post-hoc model was specified (Figure 3); which added a path from Surveillance to Tanning. Surveillance involves being consciously aware of how you look to other people; therefore, it makes sense that Tanning Behavior could be related to Surveillance. The post hoc model included this path, as it makes theoretical sense and the residuals for this relationship were greater than 3.00 in Models 1 and 2. It is important to note that the results from the post hoc analysis must be interpreted with caution, as they capitalize on chance. Although the modifications make theoretical sense, the post hoc model's GFIs are over-estimated due to fitting idiosyncrasies specific to this sample.

Prior to looking at the effects of adding in addition direct paths, Greek Membership was removed from the model because it did not significantly relate to any of the other variables. This particular study was essentially looking at a non-Greek sample, as over 87% of participants were non-Greek. As a result, the potential effects of Greek Membership cannot be accurately assessed in the current sample. Shame and Tanning Behavior were not significantly related, so this relationship was also removed from the model. The relationships between Control, and the Appearance management behaviors and Internalization were also found to be non-significant. However, these relationships were left in the model as a reminder that they make theoretical sense and need to be examined further.

Figure 3. Standardized path coefficients(parameter estimates) for Post Hoc Model



N=463 and df=21

Note: All exogenous variables were allowed to correlate* Indicates a significant path (D=) indicates the standardized disturbance term for each variable

Table 7. Post Hoc standardized direct and indirect effects (path coefficients)

	Media	Family & Peers	Relationship Status	Internalization	Surveillance	Shame	Control
Internalization	.56*	.16*	.07*	--			
Surveillance	(.35*)	(.10*)	(.04)	.63*	--		
Body Shame	(.21*)	.26* (.06*)	(.03)	.24* (.13*)	.20*	--	
Control	(-.03)	(-.01)	(.00)	-.05	--	--	--
Tanning	(.05*)	(.01*)	(.01)	(.09*)	.15*	--	.03
Disordered Eating	(.09*)	(.14*)	(.01)	(.16*)	(.09*)	.44*	.04

Note. Values outside the parentheses represent the standardized direct effects.

Values inside the parentheses represent the standardized indirect effects.

* Indicates a significant effect

The parameter estimates reported in Figure 3 indicated that all of the effects that were significant in Models 1 and/or 2 were still significant in the post hoc model. The additional path between Surveillance and Tanning Behavior was also significant; however, this path was capitalizing on chance. In addition, this relationship only explained a small portion of variance in Tanning Behavior. The GFIs are reported in Table 3 cannot be interpreted because the cutoffs do not apply when a model is modified

and re-tested on the same data. However, they were still reported to give an idea of the fit of the post hoc model in comparison to the a priori models. All of the standardized covariance residuals were below 3.00.

Implications

The results of this study suggest that there are significant relationships between certain sociocultural factors and self-objectification when the ideal being normalized in these cultural contexts is internalized. Visual media such as TV programs, music videos, magazine articles and advertisements, pictures in magazines, movies, movie stars, and famous people are all potential sources of information regarding the thin-ideal. The more a female believes that these are important sources of information about how she should look (Media Awareness), the more likely she is to internalize this information, which leads to increased Self-objectification (Surveillance and Body Shame). Heightened Media Awareness also indirectly influences the frequency of Disordered Eating behaviors.

Single females do feel more pressure to be physically attractive, as this has become a requirement for acquiring a mate in our culture. Pressure from family and friends to look a certain way indirectly influences the frequency of disordered eating behaviors. Levels of Surveillance are indirectly influenced by family and friends when their words and actions are internalized. The same can be said for Body Shame; however, shame was also directly influenced by social pressure (i.e., parents, siblings, and peers) to look a certain way. Parents as well as siblings and friends should promote a positive attitude regarding physical appearance. Genetics does not allow for a normalized body type, so parents should not pressure their child to look a particular way. In addition, if a female is surrounded with family and friends that persistently talk about how they need to lose weight or look a certain way, she may begin to share the same sentiment. Parents

most likely do not even realize the effect they are having on their children when they criticize themselves.

Myers and Crowther (2007) supported the addition of the paths from Family and Peer Influence to self-objectification. Only the path to shame was significant; which implies that sociocultural influences directly impact a specific aspect of self-objectification. This makes theoretical sense. If a female's family and friends tell her she needs to lose weight, this can induce feelings of shame because she is not meeting the thin-ideal.

Limitations

The estimated path between Greek Membership and Internalization was not significant. This was contrary to what theory suggests. However, this was likely due to the population sampled in this study. There was not a lot of variability in the Greek Membership variable, as most participants (87.4%) were not Greek. This study essentially examined a non-Greek sample. This relationship should not be disregarded, and should be looked at in future samples.

Control did not have any predictive utility in any of the models. This was foreshadowed by the very low bivariate correlations between Control and the other variables. This lack of significance could be due to problems in the measurement of Control Beliefs. Upon closer examination of the Control Beliefs subscale of the OBCS (McKinley & Hyde, 1996), it is possible that the scale could be assessing two separate aspects of Control Beliefs. Four questions asked about control related to genetics, where as the other four asked questions pertaining to personal control over appearance. It is possible that while some people are cognitively aware that their appearance is to a large extent related to genetics, they can also believe that they have a high level of personal

control over how they look. However, the total score was calculated by reverse coding the genetic control questions and adding them to the sum of the personal control items. Given the inability of this scale to correlate with related constructs, it should be re-examined. McKinley and Hyde believed that OBC relies on this fundamental concept of appearance control beliefs.

Another limitation of this study is that the directionality of the relationships being examined could be determined using the current methodology. While significant relationships were found, these are only correlational; therefore, causation cannot be established. In order to develop educational programs or interventions, it is critical to know the origin to ensure the appropriate thoughts and/or behaviors are being targeted.

Future Research

One direction for future research should be to further test the direct paths between Surveillance and Tanning Behavior. While a significant path was found in the post hoc model, this additional path capitalized on chance, and should be tested using independent samples. In addition, Disordered Eating behaviors (e.g., diet pills, purging, fasting, and excessive exercise) should be examined individually as opposed to being summed like in this study to obtain an overall frequency. While it is important to look at the frequency of eating behaviors as a whole, it is also important to see if any differences arise between the types of behavior.

Future research should differentiate between the type of family and friend influence by separating it into direct pressure on the participant versus being around those that are concerned with their own appearance. It would be interesting to see if the type of pressure impacted levels of self-objectification. In addition, this same relationship should be looked at in younger children and adolescents to see if any age differences arise, as the

current study does not identify when family and friends begin to have a significant impact on self-objectification. It is also important to eventually look at family pressure and peer pressure separately. The current study examined social influences as a whole, but it is important to see if friend and family can have different levels of influence on self-objectification. All of these avenues can be achieved with the use of the same measures used in this study; they were not pursued in the current analysis.

Myer's and Crowther (2007) did not breakdown self-objectification into smaller components, so their results did not distinguish the influence of family and peers between the sub-components of self-objectification like this study did. More research should examine the influence of Family and Peer Influence on the Surveillance and Body Shame components of self-objectification to see if the results of this study can be replicated.

The relationship between Internalization and the Control aspect of McKinley and Hyde's (1996) OBC is still unclear. While Internalization is related to Surveillance and Body Shame, it was not related to appearance control beliefs. As discussed earlier, this could be due to measurement problems with the control subscale. Another path of future research should study how Control impacts the other variables in this model. Previous research has indicated a relationship between internalization of the thin ideal and control beliefs, yet these same findings were not seen in this study. As mentioned earlier, perhaps this line of research should start with the development of a new control scale or revamping the current scale. If control beliefs could be separated into personal control versus genetic control, different results may be seen.

Future research should begin to establish the direction of the relationships discussed in this study. As indicated previously, the success of education and prevention programs relies on targeting the appropriate thoughts and/or behaviors. For example,

Media Awareness and Self-objectification are related. However, it is unclear whether it is the media or the thoughts and behaviors related to self-objectification that should be targeted.

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