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Reducing the Impact of Negative Media Messages on College Students' Body Satisfaction: Examining the Effectiveness of a Warning Message

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REDUCING THE IMPACT OF NEGATIVE MEDIA MESSAGES ON COLLEGE STUDENTS' BODY SATISFACTION: EXAMINING THE EFFECTIVENESS OF A WARNING MESSAGE

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Title: Reducing the Impact of Negative Media Messages on College Students' Body Satisfaction: Examining the Effectiveness of a Warning Message

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Exposure to media portraying objectifying images of male and female models has been shown to have a negative impact on body satisfaction for both men and women. This has been shown to be true for multiple forms of media such as print advertisements and television commercials. To combat this negative impact, Slater, Tiggemann, Firth, and Hawkins (2012) explored the effectiveness of adding a warning label to fake fashion spreads featuring objectifying images of female models. They demonstrated that this addition buffered against the typical negative effects and even improved body satisfaction for participants in the warning label conditions.

Thus, the purpose of this study was to replicate these results using a video format rather than print. It also sought to extend these findings to men, as Slater et al.'s study only included women. Results did not support the assertion that adding a warning message prior to exposure to objectifying media would buffer against this type of content's negative impact on body satisfaction. Interestingly, participants in this study did not experience the typical decrease in body satisfaction following exposure to objectifying media. Possible explanations for the results, future directions, and limitations are also discussed.

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CHAPTER I

STATEMENT OF THE PROBLEM

Body satisfaction is a view of one's overall physical appearance (Altabe & Thompson, 1996). Having greater body dissatisfaction has been shown to be a risk factor for problems in academic functioning (Yanover & Thompson, 2008a; Yanover & Thompson, 2008b), eating disturbances (Tylka, 2004), and depression (Santos, Richards, & Bleckley, 2007). For example, among female college students, 50% report dissatisfaction with their bodies (Monteath & McCabe, 1997) and 25-40% demonstrate problematic eating and dieting behaviors (Schwitzer et al., 2008). Moreover, college students have been shown to be a population especially vulnerable to depression, with longitudinal studies indicating that 20% of college students exhibit suicidality at some point throughout college (Abramson et. al., 1998). Because of this high rate of suicidality, as well as the known relationship between body dissatisfaction and depression, the study of body dissatisfaction among college students is especially important.

Historically, the body satisfaction literature has focused largely on females, as some studies have suggested that they experience greater body dissatisfaction (Altabe & Thompson, 1993) and engage in more appearance-related social comparison relative to males (Jones, 2001). More recent research has begun to study male body satisfaction and has found that males also experience body dissatisfaction, but in a different way than females. Specifically, while females are concerned with weight and size, males are more concerned with muscularity and the upper body (Cafri & Thompson, 2004). Further,

much of the more recent body satisfaction research has focused on either females or males; however, few studies have included both to allow for comparisons (for a few notable exceptions, see Altabe & Thompson, 1993; Cusumano & Thompson, 2001; Ferguson, 2013). The present study included both females and males so that such comparisons can be drawn.

In previous studies, the media has been shown to negatively impact body satisfaction in various ways. For example, several studies reveal that viewing images of thin females and muscular males rather than average-size and plus-size individuals in several mediums (e.g., music videos, television programs, commercials, and magazines) results in greater body dissatisfaction (e.g., Altabe & Thompson, 1993; Dittmar & Howard, 2004; Tiggemann & Slater, 2004; Want, Vicker, & Amos, 2009). Specifically, a study that included adolescent females ranging in age from 13-21 revealed that girls as young as 13 experience an increase in body dissatisfaction following exposure to appearance-related commercials as compared to those exposed to non-appearance commercials (Hargreaves & Tiggemann, 2003). Likewise, Hargreaves and Tiggemann (2009) found that males exposed to commercials featuring actors who fit the "muscular ideal for men" (p. 111) led to a decrease in overall appearance satisfaction as compared to males exposed to neutral commercials. This is particularly relevant in American society, as thin and attractive models and actors are quite prevalent in the media.

In addition, long-term exposure to fashion magazines has been shown to increase body dissatisfaction, perceived pressure to be thin, dieting, and bulimic symptoms in adolescents who are already vulnerable to such effects due to other factors (e.g., depression and anxiety; Stice, Spangler, & Agras, 2001). Moreover, media influences

have been shown to have a greater impact on adolescents than parental influences, especially in terms of body satisfaction (Shroff & Thompson, 2006). Finally, internalization of the thin ideal presented in the media, or the tendency to incorporate such values into one's sense of self, has been shown to have detrimental effects on body satisfaction (Dittmar & Howard, 2004). Given that a majority of adults in the U.S. can be considered overweight (Ogden et al., 2006), our understanding of "average" might be shifting, and the thin ideal may be even more unrealistic.

As evidenced by the above studies, the media may have direct and indirect, but negative, effects on levels of depression and eating disturbances. In response to these negative effects of the media on body satisfaction, new research has begun examining interventions to lessen or even eliminate the media's negative influence on body satisfaction. For example, one study found that the negative effect of the media on body satisfaction was lessened or eliminated when females were warned about the significant alteration of images (e.g., airbrushing, resizing, etc.) before viewing them (Slater, Tiggemann, Firth, & Hawkins, 2012). Studies like this one point to the possibility that effective interventions may be found to serve as a buffer against the significant negative influence the media has on body satisfaction. However, few published studies exploring such interventions exist.

As previously mentioned, viewing idealized images in various forms of media (e.g., commercials) can result in a decrease in body satisfaction. However, the majority of studies that have exposed participants to a pre-selected series of commercials showed male participants commercials featuring only males and female participants commercials featuring only females. Moreover, in most studies, the commercials are presented in

isolation, rather than embedded within a TV show. This methodology lacks ecological validity, because, in everyday life, people encounter commercials interspersed throughout TV shows, not in isolation. The latter is an important consideration, as exposing participants to media in this format more closely emulates what individuals are exposed to when they watch television in real life. A search of the literature uncovered no published studies that exposed male and female participants to media that featured both males and females in their experimental presentation, embedded commercials into a full-length television show, or embedded commercials featuring *both* males and females into a full-length television show. The research presented here does just that. It presents commercials that feature idealized images of both males and females during breaks in a full-length, neutral, but popular TV show.

The present research had four goals. First, it aimed to test the hypothesis that including a warning message before exposure to images of idealized bodies in TV commercials will decrease or eliminate their negative effect on body satisfaction for females and males. Some existing evidence supports this hypothesis for females. Specifically, Slater et al. (2012) found that adding a warning label to idealized media images in print advertisements eliminated their detrimental effect on body dissatisfaction and negative mood. However, such a hypothesis has not yet been tested with TV commercials or with male participants. Further, this study aimed to determine whether any buffering effects provided by the warning message would have a longer-term effect by including a follow-up questionnaire. Third, this study aimed to examine the difference in body satisfaction between males and females before and after exposure to commercials that portray society's body ideals and objectify both men and women.

Some previous research suggests that both males and females are susceptible to experiencing a decrease in body satisfaction following exposure to media that portrays society's body ideals (e.g., Morry & Staska, 2001). However, some studies have not supported this conclusion (e.g., Hargreaves & Tiggemann, 2003), suggesting that only females were negatively affected by exposure to such media messages. Finally, this study aimed to investigate how males and females respond differently to exposure to objectifying media, as males who are exposed to such content can experience subsequent feelings of anxiety and hostility (Johnson, McCreary, & Mills, 2007). This is an important area of study, as some believe that these feelings of anxiety and hostility could lead to violence (Kilbourne, 2010).

CHAPTER II

REVIEW OF THE LITERATURE

"Even I don't wake up looking like Cindy Crawford."

--Cindy Crawford (People Magazine, 1993)

"I wish I looked like Cindy Crawford."

--Cindy Crawford (Kilbourne, 2010)

The concept of body satisfaction has an important role in the psychological literature and in the development of adolescents (12 to 17-year olds) and emerging adults (18 to 24-year-olds; Arnett, 2000). For example, studies have revealed an association between body dissatisfaction and academic difficulties (Yanover & Thompson, 2008a), eating disturbances (Tylka, 2004), and negative affect and depression (Santos et al., 2007). Additionally, many studies have shown a relationship between body dissatisfaction and media exposure (e.g., Altabe & Thompson, 1993; Dittmar, & Howard, 2004; Richins, 1991; Tiggemann, & Slater, 2004; Want, 2009). The present research sought to add to this literature by offering an experimental investigation of the effectiveness of an intervention designed to ameliorate the negative effects of media exposure for both males and females. Before describing the present research, a review of the relevant literature is offered.

Theory

There are many theories about what causes an individual to be satisfied or dissatisfied with their physical appearance. Some such theories include Objectification Theory, the Tripartite Influence Model, Social Comparison Theory, and Sociocultural Theory (of body image). Each is presented briefly below.

Objectification Theory

According to this theory, body dissatisfaction can result when one places more emphasis and value on the body's appearance rather than its performance ability (e.g., walking, dancing, etc.; Oehlhof, Musher-Eizenman, Neufeld, & Hauser, 2009). Fredrickson and Roberts (1997) go so far as to say that "women's bodies are looked at, evaluated, and always potentially objectified" (p. 175). They believe that in American culture, females of all ages are acculturated to internalize an observer's view of their body and value this over their own view. Much of this message, that women are targets of objectification in our society, comes from the media.

Tripartite Influence Model

According to this theory, body image disturbance develops as a result of input and influence from three sources – parents, peers, and the media (van den Berg, Thompson, Obremski-Brandon, & Coovert 2002). Further, the theory posits that both appearance comparison and internalization of media messages mediate the relationship between the three influences and body dissatisfaction. That is, messages individuals receive from parents, peers, and the media lead them to internalize a preference for an idealized body and compare their body to others'. These tendencies toward internalization and comparison then result in a decrease in body satisfaction (van den Berg et al.).

Social Comparison Theory

In 1954, Festinger outlined nine hypotheses regarding the processes of social comparison, particularly those related to assessing one's abilities and opinions. He posited that individuals always seek to evaluate their abilities and opinions in some way. However, sometimes there are no set, objective criteria against which these comparisons

can be drawn. In these situations, individuals compare themselves to similar others in order to evaluate their abilities and opinions. When it comes to physical appearance, however, rather than drawing comparisons against similar others, individuals are more likely to engage in upward comparison, or comparing him/herself to someone who is better in some way (Morrison, Kalin, & Morrison, 2004). While individuals do compare their appearance to peers, they also compare their appearance to models in the media (e.g., Jones, 2001; Richins, 1991). As will be presented, these models' images have typically been manipulated in some way, making achieving a similar appearance unrealistic for most. Thus, these physical appearance comparisons often "produce decrements in self-perceptions of attractiveness" (Morrison, Kalin, & Morrison, 2004, p. 575).

Sociocultural Theory

According to this theory, body dissatisfaction is the result of three sociocultural assumptions (Morrison et al., 2002). The first of these assumptions is the emphasis on the thin (for women) and muscular (for men) body ideal that is pervasive in American society. Second is the tendency to "adopt a 'body as object' rather than 'body as process' orientation" (p. 572). The third assumption is that a thin/muscular body type is good. This final assumption is not only detrimental in terms of body satisfaction, but also in that it suggests that those who conform to this thin/muscular ideal will be rewarded while those who do not will be punished, or at least will not share in the same rewards as those deemed attractive (i.e., thin/muscular). Morrison et al. assert, "the strongest conveyors of each of these sociocultural assumptions…may be mass media" (p. 572).

Summary

Each of these theories emphasizes the idea that external messages can influence an individual's body satisfaction. Many such messages are transmitted through the media. Thus, the present study builds on the idea that exposure to idealized images in the media decreases body satisfaction as well as the accumulated research that supports this idea.

Body Satisfaction

Conceptualizations of Body Satisfaction

Body satisfaction is defined as a view of one's overall physical appearance (Altabe & Thompson, 1996). Generally, body dissatisfaction occurs when there is a "subjective disapproval of one's own body shape or form" as well as "the belief that it [the body] is unattractive to others" (Ferguson, 2013, p. 20). Although the term body satisfaction has been used interchangeably with other similar terms such as body image and body image disturbance, the former term will be used when referring to the present research. However, when presenting studies conducted by other researchers, the term chosen by those authors will be used (e.g., body image).

Body satisfaction in Females and Males

Few studies have reported the percentage of participants who endorsed body dissatisfaction. Of those that did, it was found that both females and males experience dissatisfaction with at least one part of the body, with 40-50% of 12-16 year old females (Bearman, Presnell, & Martinez, 2006), 73.2% of 12-18 year old females (Kelly, Wall, Eisenberg, Story, & Sztainer, 2005), and 51-71% of 18-23 year old males experiencing dissatisfaction with their body appearance (Frederick et al., 2007). However, the ideal

body and the body parts of specific concern are quite different for females versus males. Specifically, the main concerns for females focus on weight, body shape, and size, with most desiring to be thinner (Fisher, Dunn, & Thompson, 2002). This includes weight-related body parts such as the stomach, hips, and thighs. In contrast, the main concern for males focuses on musculature (Cafri & Thompson, 2004), with more than 90% of US college males desiring to be more muscular (Frederick et al., 2007). Importantly, Frederick and colleagues' research included participants from three colleges, each in a different region of the US, suggesting that body dissatisfaction is widespread and not limited to one location or region. The body shape preferred by males is one that is lean, tall, and muscular (Ridgeway & Tylka, 2005). Body parts of particular concern for males include the abdominal region, the chest, and the arms, or more generally, the upper torso area (Cafri & Thompson, 2004).

Additionally, males and females view their bodies differently even when they are considered to be at a normal weight. That is, males at a normal weight tend to view themselves as underweight while females at a normal weight tend to view themselves as overweight (Mills & D'Alfonso, 2007). Moreover, both males and females have a distorted view of the body shape preferred by the opposite sex. Specifically, males believe that females prefer a leaner and more muscular body than they actually do, while females believe that males prefer a skinnier body than they actually do (Olivardia, Pope, Borowiecki, & Cohane, 2004).

Correlates of Body Satisfaction

Despite the differences in how males and females conceptualize an ideal body, body satisfaction has been found to be associated with many variables for both males and

females. Some of these variables include problems in academic functioning, eating disturbances, negative affect and depression, lower self-esteem, and less self-efficacy. Unfortunately, many studies examining these variables suggest that body dissatisfaction has a problematic relationship with psychological health. Specifically, the above-mentioned variables frequently show an inverse relationship with body satisfaction (e.g., Stice & Bearman, 2001; Tylka, 2004; Yanover & Thompson, 2008a). Because these variables were not the focus of this study, three were selected and are presented below.

Problems in Academic Functioning

Two papers have correlated body dissatisfaction with problems in academic functioning, including attendance, attention in class, and completing assignments. Among male and female undergraduates, Yanover and Thompson (2008a) found that participants who were less satisfied with their bodies exhibited greater levels of academic interference (i.e., poor attendance, lower grades). Using the same sample, Yanover and Thompson (2008b) were also able to examine multiple dimensions of body satisfaction, and found that each one correlated with academic interference. Specifically, participants who negatively evaluated their appearance, were more concerned with their appearance, and were more preoccupied with their weight had higher levels of academic interference. A search of the literature revealed no other studies examining the relationship between these variables. Considering the importance of academic functioning, it would be useful for future research to further investigate the connection with body satisfaction.

Eating Disturbances

Several studies have also found associations between body dissatisfaction and eating disturbances, also referred to as eating disorder symptomatology. For example,

Thompson and Altabe conducted two studies (1991; 1992) utilizing the Figure Rating Scale (Stunkard, Sorenson, & Schulsinger, 1983), a series of nine male and female schematic figures of differing sizes. In the first study (1991), to measure body satisfaction, male and female undergraduates were asked to select the figure that best represented how they emotionally felt their body looked as well as the figure that best represented how they intellectually believed their body looked. Results revealed that both males and females who emotionally felt larger than they intellectually believed they looked (i.e., those with higher body dissatisfaction) had higher levels of eating disturbance (e.g., bulimic-like behaviors) as measured by the Eating Disorders Inventory (Anderson, Lundgren, Shapiro, & Paulosky, 2004). In the second study (1992), which also utilized the Figure Rating Scale as a measure of body satisfaction, results revealed that a greater discrepancy between how college females felt about their current body shape versus how they felt about their desired ideal body shape significantly predicted bulimic symptoms, such as binging and purging behaviors. Further, Tylka (2004) found that both body surveillance (i.e., constantly monitoring one's appearance) and having a friend or family member who had an eating disorder intensified the relationship between body dissatisfaction and eating disorder symptomatology among adolescent females. Similarly, a study of adolescent females by Stice and Bearman (2001) found a negative relationship between body satisfaction and dieting and bulimic symptoms. Although Thompson, Coovert, Richards, Johnson, and Cattarin (1995) did not find this same relationship between body satisfaction and bulimic symptomatology, they did find that greater body dissatisfaction in female adolescents led to some eating disturbances,

specifically restrictive eating. As is evidenced by these studies, dissatisfaction with one's body is often linked to problematic eating behaviors (e.g., restriction, binging, purging).

Negative Affect and Depression

Two studies examining body satisfaction among 13-17 year olds found correlations between body satisfaction and negative affect and depression. The first study found that initial levels of body dissatisfaction significantly predicted later increases in adolescent girls' depressive symptoms at both a 10 and 20-month follow-up assessment (Stice & Bearman, 2001). A more recent study found that both boys' and girls' levels of body dissatisfaction were significantly related to depressed mood and negative affect, although girls endorsed significantly greater levels of depressed mood and negative affect than boys did (Santos et al., 2007). Further, McFarland and Petrie (2012) found that, among male undergraduates, body dissatisfaction was significantly correlated with depressive symptoms, including negative affect.

Additional studies have examined various aspects of negative affect more specifically. For example, a correlational study revealed that body dissatisfaction was significantly correlated with hostility, guilt, and depressive symptoms among college men (McFarland & Petrie, 2012). In addition, Bessenoff (2006) found that women who had greater body dissatisfaction (characterized by greater discrepancies between actual and ideal body size/shapes) experienced more depressive thoughts, had lower self-esteem, and engaged in more self-criticism. Taken together, these studies suggest that body satisfaction is an important aspect to consider for both males' and females' psychological well-being. However, the literature on body satisfaction and negative affect and

depression is currently limited to these papers. Considering the importance of this topic, more research should be done to further investigate this area.

The Media and Body Satisfaction

As is clear from the above section, body dissatisfaction is associated with problematic outcomes. A substantial literature suggests that in addition to peer and parental influences (e.g., Jones, 2001; Shroff & Thompson, 2006; Sperry, Thompson, Roehrig, & Vandello, 2005; Thompson et al., 2007), a significant contributor to body dissatisfaction comes from idealized and objectifying images presented by the media (e.g., Agliata & Tantleff-Dunn, 2004; Cattarin, Thompson, Thomas, & Williams, 2000; Dittmar & Howard, 2004; Farquhar & Wasylkiw, 2007; Gurari, Hetts, & Strube, 2006). Because there is more research investigating this relationship among females than males, studies that focus on females will be presented first.

Effects of Media Exposure on Females

A large and growing body of research, with few exceptions, suggests that exposure to idealized and objectifying images in the media leads to body dissatisfaction. For example, in their meta-analysis of experimental studies, Groesz et al. (2002) found a medium effect suggesting that female participants who were experimentally exposed to media images depicting thin women were significantly less satisfied with their bodies compared to participants who were experimentally exposed to average-weight models and overweight models (Cohen's d = -.30). Another meta-analysis of studies focusing exclusively on women (Want, 2009) found a medium effect size (Cohen's d = -.38) from the included studies (effect size range: -1.48 to 1.16 with 67 negative and 8 positive

effect sizes) such that exposure to media portraying the thin and attractive ideal was associated with greater body dissatisfaction.

Additionally, a study by Dittmar, Halliwell, and Ive (2006) investigated the effects of exposure to images of different size dolls on five- to eight-year-old girls' body satisfaction. In this study, exposure to the extremely thin Barbie doll image led to decreased body satisfaction, whereas exposure to the more average sized Emme doll image did not significantly change participants' body satisfaction. This decrease in body satisfaction after exposure to the Barbie doll was evident for girls between the ages of 5.5 and 7.5, with the decrease being more dramatic for girls age 6.5 to 7.5 as compared to girls age 5.5 to 6.5. However, the effect was not present for 7.5 to 8.5 year old girls. Given that there was no significant difference in pre-exposure body dissatisfaction among the age groups, Dittmar and colleagues suggested that the stability in body satisfaction for the oldest age group is due to girls having already internalized the thin-ideal message by this young age. These findings support the conclusion that exposure to the thin ideal in the media decreases satisfaction with one's body beginning at a very young age.

Other experimental studies have investigated the impact of exposure to media containing models versus media containing no models. For example, Tiggemann and McGill (2004) exposed women to one of three advertisements containing product, body part, or full body images and measured their body satisfaction before and after exposure. The product advertisements, which highlighted items such as shoes, toiletries, accessories, etc., contained no people. The advertisements featuring body parts contained images of weight-related female body parts (e.g., stomach, thighs) of thin-ideal models. Finally, the full-body advertisements contained the female model's face and at least ¾ of

her body. Findings indicated that exposure to the thin-ideal advertisements, both body part and full body, led to greater body dissatisfaction than exposure to the product advertisements. Further, participants' body satisfaction significantly decreased after exposure to advertisements regardless of whether they depicted full body images of women or only body parts, but not after viewing the advertisements containing only a product.

Another study (Clay, Vignoles, and Dittmar, 2005) investigated the effects of exposure to either advertisements featuring models or advertisements featuring neutral images (e.g., Christmas stockings) on participants' body satisfaction. In this study, women who viewed advertisements of ultra-thin models did not differ in levels of body satisfaction from those who viewed advertisements of average-size models (UK dress size 12-14; US dress size 10-12). However, there was a significant difference in body satisfaction between participants who viewed advertisements with models and those who viewed advertisements with neutral images. This difference was such that those who were exposed to models were significantly more dissatisfied with their bodies compared to those who were exposed to neutral images. The results of this study suggest that exposure to images of attractive females, regardless of their size, can result in subsequently feeling less satisfied with one's body.

Similarly, Birkeland et al. (2005) showed college women 5-minute slideshows composed of advertisements with attractive models, household products, or appearance-related products. They found no difference in body satisfaction between the two product conditions (household versus appearance). However, there was a significant difference in body satisfaction between participants who viewed advertisements with models and

participants who viewed advertisements for products, such that body dissatisfaction increased for participants who were exposed to the advertisements with models.

Further, Richins (1991) found that college females who were exposed to images of advertisements with models experienced greater body dissatisfaction compared to women exposed to images of advertisements with no models. Moreover, he extended the study by including additional dependent variables; in addition to rating their body satisfaction, participants rated their own level of attractiveness, and the attractiveness of images of average college females. Results suggested that women who were exposed to the model advertisements rated the average college students as less attractive compared to those who were exposed to the advertisements with no models. Surprisingly, however, there was no significant difference in ratings of own attractiveness between the groups.

Finally, Bessenoff (2006) exposed undergraduate women to either advertisements portraying women who fit the thin-ideal or neutral (e.g., watches, cars, furniture, etc.) advertisements and found that exposure to the neutral advertisements had no effect on body dissatisfaction. However, exposure to the thin-ideal advertisements produced increases in body dissatisfaction. Overall, the findings of the previous five studies indicate that exposure to models in print media leads to more body dissatisfaction, while exposure to neutral stimuli does not.

In addition to print media, further experimental studies have investigated the effects of the media on body satisfaction utilizing videos. For example, Tiggemann and Slater (2004) exposed women ranging in age from 18-30 to either an appearance-focused video or a nonappearance video; these videos included various clips from music television. Afterward, participants who had been exposed to the appearance-focused

video were significantly less satisfied with their bodies compared to those exposed to the nonappearance video. In addition, the former participants felt significantly less physically attractive and "fatter" following exposure to the video. Further, Hargreaves and Tiggemann (2003) studied adolescents ranging in age from 13-21 and found that girls as young as 13 experience a similar increase in body dissatisfaction following exposure to appearance-related commercials as compared to those exposed to non-appearance commercials.

Rather than simply comparing appearance and non-appearance related media, Cattarin, Thompson, Thomas, and Williams (2000) investigated the effects of a video compilation of commercials containing a thin, attractive female as well as one containing a female who does not fit this societal ideal (control video). Findings suggest that, compared to their pre-test body satisfaction scores, women who saw the video of the thin and attractive woman reported a significant increase in dissatisfaction with their appearance following the video. In contrast, participants who saw the control video were significantly more satisfied with their appearance following the video as indicated by a significant improvement in body satisfaction scores.

Effects of Media Exposure on Males

Just as females are negatively influenced by the size and physical appearance of models in the media, so too are males. A meta-analysis including 15 experimental (d = -.22, p < .0001) and 10 correlational (d = -.19, p < .0001) studies that investigated how the media affects males' body satisfaction found that, regardless of the type of media (e.g., television vs. action figures), exposure led to a decrease in body satisfaction (Barlett, Vowels, & Saucier, 2008). The authors of this meta-analysis also found that

media exposure led to a more negative overall self-image, which included additional factors such as self-esteem. Further, perceived pressure from the media was shown to be associated with lower body satisfaction and a more negative overall self-image. Interestingly, this relationship was stronger among college-aged males than adolescent males, suggesting that the former population might be the most vulnerable to the negative effects of exposure to media depicting the male body ideal.

A study by Morry and Staska (2001) explored body satisfaction related to exposure to fitness magazines (e.g., Fitness, Men's Fitness, Muscle & Fitness, etc.). Exposure was measured using the Magazine Exposure Scale, which was created for this study. Ongoing exposure was determined by summing the number of fitness magazines men had reportedly read over the past month. Results revealed that male participants who reported that they spent time reading fitness magazines reported significantly greater body shape dissatisfaction as compared to men who did not read such magazines and instead read "filler" (e.g., Rolling Stone, Sports Illustrated, etc.) magazines. In addition, men who read fitness magazines exhibited significantly more self-objectification, or the tendency to "think about and value their own bodies from a third-person perspective, focusing on observable body attributes" (p. 270), and more eating disturbances as compared to the men who read "filler" magazines.

In addition to simple exposure to the media, Tiggemann (2005) found that certain content of television shows negatively affects adolescent males. In particular, adolescent males who watched soap operas and/or music videos reported greater drive for thinness and muscularity as compared to those who watched comedies, news shows, children's television shows, and documentaries. Tiggemann also explored the motivation behind

television viewing and found that those who watched television as a form of social learning (e.g., to learn how people my age behave, to get ideas about what clothes and hairstyles are in fashion) had greater body dissatisfaction and reported more eating problems. In contrast, watching television for entertainment did not have such negative consequences. Because young children and adolescents learn about the world by watching others, including individuals depicted in the media, the media has great potential to have a positive, rather than negative, impact on body satisfaction and overall self-image.

Other studies have investigated how the media affects males by utilizing experimental and pre/post-test designs. For example, Hobzo and Rochlen (2009) found that exposure to print ads portraying men who fit the muscular ideal led to a significant decrease in body esteem. In contrast, there was no change in body esteem for men who viewed neutral images (e.g., detergent, toothpaste, electronics). Further, another study exposed undergraduate men to either neutral commercials (e.g., food, cars, insurance) or commercials that depicted "the ideal man." Results revealed that exposure to the ideal commercials led to a significant increase in muscle dissatisfaction and a significant decrease in self-ratings of physical attractiveness (Hargreaves & Tiggemann, 2009).

Beyond Body Satisfaction

In addition to the potential for negatively impacting body image and satisfaction, exposure to certain types of media has also been linked to other variables such as depression, anxiety, negative mood, self-esteem, and even unhealthy eating habits. For example, Hausenblas, Janelle, and Gardner (2004) exposed undergraduate women who demonstrated high drive for thinness (as measured by the drive for thinness subscale on

the Eating Disorders Inventory-2; Garner & Olmsted, 1984) to images of female models who fit the thin ideal. Immediately after exposure, these women experienced a significant increase in negative affect, which remained two hours later. Additional studies have demonstrated that women who were exposed to appearance-related commercials and thin ideal images subsequently experienced an increase in anger and negative mood, respectively (Hargreaves & Tiggemann, 2002; Tiggemann, Polivy, & Hargreaves, 2009). Similarly, Swami and Smith (2012) revealed that women experienced a significant decrease in happiness following exposure to a commercial-free modeling competition television show (*Britain's Next Top Model*). In contrast, there was a significant increase in happiness for women who watched a commercial-free nature-related television show (*Natural World*).

Moreover, Cattarin and colleagues (2000) assessed female undergraduates' levels of depression and anxiety before and after exposure to media stimuli and found that exposure to a video depicting thin and attractive women led to an increase in depression and anxiety. In contrast, participants who were exposed to a video depicting women who did not fit this thin and attractive ideal experienced a decrease in depression and anxiety following exposure. A similar study found that college women who were exposed to images with females who represented the thin ideal experienced a significant increase in negative mood (Tiggemann & McGill, 2004). In another study, 11-16 year-old girls who viewed images of thin-ideal models reported significantly lower levels of self-esteem compared to those who viewed images of a neutral object (i.e., Christmas stocking; Clay et al., 2005). Overall, a large and expanding body of research indicates that exposure to media images that show models who fit the thin and attractive ideal has a detrimental

effect on women's body satisfaction, self-esteem, and affect. Media with no models, neutral images, or advertisements and shows that are not focused on appearance do not have these same damaging effects.

Research has also investigated the impact of exposure to idealized images of the male body in the media on men's affect. Agliata and Tantleff-Dunn (2004) found that men who were exposed to commercials containing men who fit the muscular ideal became significantly more depressed compared to those who saw neutral commercials (e.g., car companies, insurance, etc.). Similarly, Farquhar and Wasylkiw (2007) found that college men who were exposed to aesthetically focused images of muscular men experienced an increase in depressive symptoms. In contrast, those who saw performance-focused images of muscular men experienced a decrease in depressive symptoms.

However, it is not just exposure to ideal male images that leads to negative affect among males. Johnson et al. (2007) investigated the effects of exposure to objectifying male images, objectifying female images, or neutral images on affect. They found that college men who saw objectifying female images reported significantly greater levels of anxiety and hostility compared to those who saw either the objectifying male or neutral images. Interestingly, no detrimental effects were reported for men who saw objectifying male images.

Turning to the effects of media on eating behaviors, Gurari, Hetts, and Strube (2006) showed undergraduate females advertisements that had either thin and attractive models or no models. Following this exposure, they asked the women to wait in another room for a few minutes until the experimenter came back for them. There was a

selection of junk food and healthy food on a table in the waiting room and before the experimenter left he/she told the participants to help themselves to the food. They determined how much of each type of food was eaten by the participants by weighing the food before and after each participant was in the room. Participants who had seen the advertisements with the thin and attractive models ate significantly less junk food compared to those who had seen the advertisements with no models. There was no difference in the amount of healthy food eaten by participants based on which images they had seen.

It is evident, based on the results from the above studies, that exposure to media depicting idealized males and females has a negative effect on more than just body satisfaction. These findings also reiterate just how important it is to gain a better understanding of what variables impact body image so that appropriate measures can be taken and interventions created to ameliorate potentially negative outcomes. Thus, examining these relationships in a variety of populations, including college students, may offer a better understanding of the underlying mechanisms of this problem with the ultimate goal of applying this knowledge to individuals of all ages.

Additional Variables that Affect Body Satisfaction

Awareness and Internalization of Society's Body Ideals

When considering the media's effect on body satisfaction, two important factors to consider are awareness and internalization of the ideals and expectations communicated by the media. However, before individuals integrate media messages into their sense of self, they must first navigate and make sense of these messages. To date, few studies have investigated the degree to which peers, parents, and friends influence

the relationship between media exposure and body satisfaction. One study, however, found that friends were important in helping adolescent boys and girls to make sense of media messages (Krayer & Iphofen, 2007). For example, peers can help each other figure out, according to media messages, society's expectations of body appearance and attractiveness. Another study found that peer and media, but not parent influences, were associated with both comparison and internalization for adolescent girls (Shroff & Thompson, 2006). That is, peer and assumed media opinions increase the degree to which adolescent girls internalize the thin and beautiful ideal and compare themselves to others. Further, a meta-analysis of studies with both male and female participants found that perceived pressure to be thin from friends, society, and the media was significantly associated with body image, such that as perceived pressure increased, body satisfaction decreased (Cafri, Yamamiya, Brannick, & Thompson, 2005).

Furthermore, some studies have investigated the role of three major aspects of media influence: awareness of the body ideals portrayed in the media, internalization of media messages, and perceived pressure from such media messages. The awareness aspect involves the extent to which individuals are conscious of the value that society and the media place on physical appearance, specifically being thin and attractive for females, and tall, lean, and muscular for males. The internalization aspect involves the extent to which individuals have taken this message to heart and incorporated it into their personal values. Finally, the perceived pressure aspect involves the extent to which individuals feel obligated to conform or try to conform to the physical appearance standards portrayed by the media.

For example, Cusumano and Thompson (2001) noted that while internalization, awareness, and pressure were all significantly correlated with body dissatisfaction among both college males and females, level of internalization accounted for the most variance in body dissatisfaction. Similarly, Stice and Bearman (2001) studied the relationship between body satisfaction and internalization, awareness, and pressure in adolescent girls. They found that girls who internalized the thin ideal to a greater extent also exhibited higher levels of body dissatisfaction. Another study found that between internalization and simple awareness of sociocultural attitudes regarding the thin and attractive ideal, the former contributes to body dissatisfaction more than the latter for undergraduate females (Stormer & Thompson, 1996).

Further, another study found that females with a high level of internalization experienced a significant increase in appearance satisfaction following exposure to images of models who did not fit the thin and attractive ideal (Cattarin et al., 2000). However, these same females became significantly less satisfied with their appearance after being exposed to images that did fit the thin and attractive ideal. When considered in combination with the previously presented research indicating that the media has a significant influence on body satisfaction, it appears that a complete understanding of the process involves acknowledging the roles of internalization, comparison, and perceived pressure to conform to societal ideals. As is common in the body satisfaction literature, however, the role of these variables has been studied more widely in females than in males.

Social Comparison

Social comparison, the act of judging one's own characteristics or abilities against

others', has been found to be an important variable when considering the relationship between the media and body dissatisfaction. This is especially important to consider when studying college students, as Richins (1991, with a female sample) and Jones (2001, with a male sample) found that this population engages in significantly more comparison to models in the media than adolescents and older adults do. Additionally, because most individuals who fit society's body ideals portrayed in the media are young adults, the comparison might be more relevant and impactful for college-age individuals (Peat, Peyerl, Ferraro, & Butler, 2011).

When examining social comparison among adolescents, Krayer, Ingledew, and Iphofen (2007) found that appearance-related comparison is often linked to a general feeling of uncertainty. They also discovered that adolescents made upward appearance-related comparisons more often when they had low self-confidence and/or were in a more negative mood. Importantly, social comparison, especially comparison related to size and weight, has been found to be associated with body dissatisfaction (Stormer & Thompson, 1996), such that males and females who engaged in more social comparison were less satisfied with their bodies (Jones, 2001; Richins, 1991). More specifically, Jones found that body shape comparisons in men were associated with greater levels of body dissatisfaction, while Richins found that overall physical appearance comparison (e.g., body shape, body size, facial attractiveness, etc.) predicted body dissatisfaction for women. In addition, Bessenoff (2006) found that women with a greater degree of body dissatisfaction were much more likely than women without such high levels of body dissatisfaction to compare themselves with others, particularly to individuals in the media.

To experimentally study the effects of social comparison, Engeln-Maddox (2005) instructed some of their college female participants to generate comparisons to advertisements they were shown as part of the experiment. These advertisements depicted females who fit the thin and attractive ideal. Findings suggested that, compared to participants who were not instructed to make these comparisons, those who were instructed to do so not only had significantly higher levels of internalization of the implied importance of the thin and attractive ideal, but also were significantly more dissatisfied with their bodies.

Similarly, Shorter, Brown, Quinton, and Hinton (2008) asked female college students (ages 18-27) to select a celebrity who was roughly their same age and whom they admired with whom they could compare themselves. Next, participants indicated what they believed best represented their personal body size and shape, the chosen celebrity's body size and shape, and their ideal body size and shape by circling the appropriate female figure out of many figures that ranged from small to large. Findings indicated that participants who had greater discrepancies between their actual body size and shape and the chosen celebrity's body size and shape also had greater levels of disordered eating compared to participants who had smaller discrepancy scores.

Finally, Tiggemann and McGill (2004) examined the impact of three different instructional sets for viewing images of thin-ideal models. One set asked college women to compare themselves to the thin-ideal models in the images, another to focus on the appearance of the models in the images, and the third simply to view the images as they would if they were at home. They found that not only did the comparison instructions elicit the greatest amount of comparison, but also that the women who engaged in the

greatest amount of comparison also exhibited greater levels of negative mood and body dissatisfaction. In other words, they found that social comparison mediated the relationship between exposure to the thin ideal in the media and negative mood and body dissatisfaction.

Participant Attributes

In addition to awareness, internalization, perceived pressure, and social comparison, participant attributes such as pre-exposure body satisfaction, social support, and age are also important to take into consideration when drawing conclusions from experiments investigating the relationship between media exposure and body satisfaction. Several studies have already done so. One study, for example, found that, compared to women who did not have significant levels of body image disturbance, college women who did exhibit high levels of body image disturbance experienced greater levels of depression, weight dissatisfaction, and overall appearance dissatisfaction following exposure to images cut from magazines of various body parts of women who represented the thin-ideal (Altabe & Thompson, 1996). Similarly, a meta-analysis found that adolescent and college age females who already had high levels of body dissatisfaction experienced a significantly greater increase in body dissatisfaction following exposure to thin and attractive media images compared to those who did not have significant body dissatisfaction (Groesz, Levine, & Murnen, 2002).

Furthermore, Stice and colleagues (2001) found that vulnerable adolescent girls, or those who felt significant pressure to be thin and were more dissatisfied with their bodies initially, experienced significantly greater negative affect compared to non-vulnerable adolescents following exposure to a fashion magazine depicting thin and

attractive women. Moreover, adolescents in this study who did not have sufficient social support were significantly less satisfied with their bodies, dieted more, and experienced more bulimic symptoms immediately after exposure to the fashion magazine and at a 10-month follow-up.

In addition to prior levels of body satisfaction, age has also been shown to play a part in the relationship between media exposure and body satisfaction. The same meta-analysis described in the previous paragraph found that adolescent females were more negatively affected by exposure to media stimuli depicting individuals who fit the thin and attractive ideal compared to those who were 19 and over (Groesz et al., 2002). Additionally, Clay and colleagues (2005) found that adolescent girls who were exposed to a magazine cover featuring a model reported significantly lower body satisfaction and self-esteem compared to those exposed to a magazine cover featuring a Christmas stocking. Further, they found that regardless of exposure condition, self-esteem and body satisfaction were significantly lower for older adolescents compared to younger adolescents. Taken together, these two results suggest that older adolescents (15-18) are more vulnerable to such effects than both younger adolescents (12-14) and emerging adults (19+). It seems that these negative effects are coming into play at younger ages (i.e., mid to late adolescence), and are intensified for those who already experience some type of negative symptom (i.e. body dissatisfaction).

Media Portrayals and the Potential for Violence

The negative outcomes of exposure to society's body ideals in the media do not stop with the mental health of individuals. Instead, these effects extend to social judgments and interactions. For example, Ridgeway and Tylka (2005) found that the

reason men monitor their bodies is to appear attractive to and for other people. Potentially more detrimental than simply wanting to appear attractive to others is the finding that many men want to become more muscular in order to increase their dominance over others (Frederick et al., 2007). In a similar vein, Mills and D'Alfonso (2007) suggest that men might use their physical appearance as a way to increase their feelings of self-worth. This assertion was made in light of their finding that after losing at an experimental task (i.e., solving a series of anagrams) college men became more dissatisfied with their physical appearance and less confident in both their physical and social abilities. When the men lost to a woman rather than another man, these effects were even stronger.

Other research has found that exposure to society's body ideals can lead to self and other objectification, harsher judgment of average people, and potentially even violence (e.g., Kenrick & Gutierres, 1980; Richins, 1991). In her documentary, *Killing us Softly, 4 (2010)*, Jean Kilbourne suggests that American society rewards sexualized appearance and behaviors so much that people have begun to sexualize and objectify other people as well as themselves. As a result of the near constant objectification of flawless individuals in the media, consumers judge average people much more harshly. For example, it has been shown that following exposure to the female ideal in a movie, males judged an "average" woman to be significantly less attractive compared to males who were not exposed to the female ideal (Kenrick & Gutierres, 1980). Males, however, are not alone in their subsequent harsh judgment of average people. Richins (1991) found that females who were exposed to advertisements containing thin-ideal female

models rated "average" females as less attractive compared to females exposed to neutral advertisements.

Finally, Kilbourne (2010) pointed out a critical but often overlooked difference between the way females and males are portrayed in the media. Specifically, she noted that in advertisements, female body language is most often passive and vulnerable, portraying them as fragile, weak, and less powerful. In contrast, males, even when they are objectified, are portrayed as being the bigger, stronger, more powerful sex. She points out that such advertisements not only portray men and women very differently, they also eroticize violence by depicting murder, battery, and images that can be interpreted as either a consensual interaction or a violent one. One example of an advertisement that, without additional context, could be interpreted as a consensual or violent interaction is a print advertisement for Dolce & Gabbana that depicts a man holding a woman on the floor by her arms. Another example of violence in the media is a print advertisement for Superette High Fashion clothing, which shows a woman lying dead on a staircase and features the slogan "Be caught dead in it". Kilbourne suggests that the stark contrast between media presentations of males and females and the normalization and desensitization of battery and murder sometimes depicted in these media presentations may have the alarming potential to lead to violence.

Importance of Alternative Options

Collectively, these findings suggest that exposure to the ideal male/female body type in the media can have a variety of negative outcomes, including body dissatisfaction, eating disturbances, negative affect, anxiety, and hostility (Frederick, et al., 2007; Gurari et al., 2006; Hausenblas et al., 2004; Schuster, Negy, & Tantleff-Dunn, 2013), and that

the individual's perceptions of self and others are influenced by the images they view (e.g., Aubrey, 2006; Farquhar & Wasylkiw, 2007; Kenrick & Gutierres, 1980; Mills & D'Alfonso, 2007).

Recent research has taken up the challenge of developing interventions to ameliorate these damaging effects. A study by Fister and Smith (2004) provides some hope that exposing individuals to more realistic images can lessen the media's negative effects. Specifically, they found that exposing women to just 10 images of realistic females significantly reduced the participants' drive for thinness and endorsement of unhealthy eating practices (e.g., restricting). Because of the significant positive effect demonstrated by just one exposure, they suggest that continuous exposure to the thin and attractive ideal will undoubtedly have a much greater negative effect. Thus, they suggest that the media make efforts to portray more varied and attainable body shapes and sizes.

Another study revealed that advertising will not suffer from hiring models with more attainable body shapes because models do not have to be very thin in order for the advertisement to be effective (Halliwell & Dittmar, 2004). This study utilized an image of an attractive woman and an average woman, both of whom were very thin. To determine whether attractiveness or size of the model was most important for the effectiveness of the advertisement, the researchers created additional images by stretching the original pictures so that the models appeared to be "average" size. Female participants, ranging in age from 19-67, saw two advertisements containing the thin-attractive model, thin-average model, average-attractive model, average-average model, or a landscape. Results revealed that the advertisements featuring the more attractive model, both thin and average size, were more effective than those containing the less

attractive model. Halliwell and Dittmar assert that the effectiveness of an advertisement is dependent on the model's attractiveness rather than her size. Thus, companies can advertise their products effectively by utilizing attractive models who do not necessarily fit the thin ideal, hopefully reducing the negative effect on consumers' body satisfaction.

Additional studies have investigated whether the negative consequences of exposure to the muscular ideal would remain if portrayals of muscular males were less objectifying. That is, will men experience a decrease in body satisfaction when exposed to males who embody the muscular ideal when those males are portrayed in a way that is not objectifying or primarily focused on their physical appearance? Farquhar and Wasylkiw (2007) exposed college men to images that portrayed the "body as object" with a focus on aesthetic attributes, and those that portrayed the "body as process" with a focus on performance attributes. Results revealed that men exposed to the aesthetic images experienced a decrease in social and appearance self-esteem. In contrast, men exposed to the performance images experienced an increase in social and appearance self-esteem, which was not predicted. One explanation provided by the authors is that the activity aspect of the image may have served as a distraction from the appearance aspect of the model. They suggest that because men in American society have been "socialized to focus on the instrumental abilities of their bodies" (p. 157), they may have been more prepared to process this information as opposed to information related to appearance or "body as object". In a related investigation, Hobzo, Walker, Yakushko, and Peugh (2007) exposed college men to either aesthetically focused images of male models or images portraying male models with a focus on status and wealth. Similar to the former study, men in the aesthetic group reported significantly lower levels of self-rated physical

attractiveness and overall physical condition as compared to those in the status and wealth group. Taken together, these studies suggest that the media can alter the portrayal of individuals, thereby reducing the negative impact on consumers' body satisfaction, but retaining advertising effectiveness and media appeal.

Other studies have used instruction or intervention manipulations as part of their experiments. Lew, Mann, Myers, Taylor, and Bower (2007) utilized two different comparison instructions with a college female population. One group was instructed to write a description of the thin-ideal models presented while another was instructed to write about comparisons between themselves and the models on any non-appearance dimensions. Results revealed that non-appearance related comparisons led to significantly greater body and weight satisfaction, less body anxiety, and lower desire to lose weight compared to the group that described the models. Based on this, the authors suggest that one way to potentially combat the negative effects of media exposure is for women to compare themselves to the models in the media in writing on dimensions that are not related to appearance, such as intelligence and sense of humor.

In another experimental study, Roehrig, Thompson, and Cafri (2008) compared the effects of different messages on females' eating pathology. The content of these messages contained health information taken from reputable sources (e.g., CDC) and represented messages that consumers receive on a regular basis. They exposed participants to a pro-dieting message, an anti-dieting message, or no message and found that the pro-dieting message produced the greatest level of perceived pressure to lose weight. In addition, the pro-dieting message induced greater dieting intentions, but also

significantly increased participants' healthy eating behaviors from baseline to the 2-week follow-up.

Other studies have taken an educational approach to combating the negative effects of exposure to the thin ideal presented in the media. For example, one study attempted to improve participants' body satisfaction by presenting them with a psychoeducational vignette, which contained information regarding "genetic realities" and "artificial beauty" (Sperry, Thompson, Roehrig, & Vandello, 2005). The vignette emphasized the importance of refraining from comparing themselves to individuals portrayed in the media because genetics contributes significantly to physical appearance and because the images in the media are manipulated, thus creating artificial beauty. Results revealed that females who read this vignette prior to being exposed to thin ideal images reported a significantly greater reduction in dissatisfaction with their bodies compared to those who did not read this vignette.

Similarly, another study gave some women a *weight and shape intervention,* others an *appearance intervention* and still others *no intervention* (Want et al., 2009). The *weight and shape intervention* focused on the fact that models and actors depicted in the media do not represent the population's range of weight and body shape. The *appearance intervention* focused on the fact that models' and actors' appearance is frequently altered with the help of make-up, lighting, and plastic surgery. Next, participants were exposed to a television program that featured thin and attractive models. Results suggested that the *weight and shape intervention* was significantly more effective in combating the negative effects of exposure to the television program compared to both the appearance intervention and no intervention. This was evidenced

by the finding that women in the *weight and shape intervention* group were significantly more satisfied with their appearance after viewing the television program.

A more recent study exploring the effect of media on females' body image utilized a similar method (Slater et al., 2012). Specifically, the researchers embedded warning labels into fashion magazine spreads. In one condition, the warning label simply stated that the images had been altered, while in a second condition the warning label outlined specifically how the images had been altered (e.g., size of thighs reduced, wrinkles eliminated, breasts enlarged, etc.). They found that, compared to a third group that saw the spread without any warning label, individuals in both warning label groups were significantly more satisfied with their bodies after being exposed to the spread.

As has been discussed, the negative effects of exposure to the media are numerous and have an impact on both males and females of a variety of ages. However, the above studies suggest that there are options that can be utilized to serve as a buffer against these negative effects. Despite this fact, there are very few studies demonstrating these positive effects, with each approach represented by only one or two studies. Because of this, the reliability of these findings needs to be further tested. Additionally, each of the above studies utilized female participants and a literature review uncovered no similar studies for the male population. Thus the effectiveness of this approach for males is an open question. Because the media is likely going to continue to portray perfection and objectify models and actors, it would be wise to continue testing the effectiveness of methods that attempt to change the way consumers view and interpret media messages. For this reason, the warning message method introduced by Slater and colleagues (2012)

was conceptually replicated in the present research in the hopes that displaying a warning message prior to exposure may serve as this instigator of change.

Purpose and Overview of the Present Research

Overall, body dissatisfaction and related problems continue to be significant issues for today's emerging adults. As described above, a substantial body of literature suggests that idealized and objectifying images presented in the media may increase body dissatisfaction. Despite the media's negative effects, the research described in the previous section reveals that there are interventions that have shown promise in mitigating its negative effect on body satisfaction. However, such interventions have been utilized in only one or two studies each. As a result, the interplay among exposure to the media, body dissatisfaction, and potential mitigating factors warrants further study.

To add to this literature, the primary purpose of the present research was to conceptually replicate the findings of the Slater et al. (2012) study, which demonstrated the effectiveness of including a warning label on a fashion spread. The present study tested the effectiveness of a warning message when participants are exposed to video rather than print media. Thus the present research examined the effect of media exposure on body satisfaction in both male and female college students, and tested whether exposing participants to a warning message could prevent them from experiencing a decrease in their body satisfaction. The selection of college students has both a theoretical and practical basis, as prevalence rates of body dissatisfaction are particularly high among college students (Abramson et al., 1998). Additionally, Abramson and colleagues found that college students may be especially vulnerable to depression, and depression has been shown to be related to body dissatisfaction (Stice & Bearman, 2001).

Moreover, a purposeful choice was made to include both males and females as participants. Despite the large number of studies that have examined body satisfaction among females, there is a need for experimental studies that also include males. Although separate studies have shown that exposure to the media produces a decrease in body satisfaction in both males and females, previous research has not drawn comparisons between male and female body satisfaction following exposure to commercials that idealize and objectify both male and female models and very little research has examined the effectiveness of interventions to prevent negative media effects among males or females. In particular, the Slater et al. (2012) study that inspired the current research included only female participants. In addition, a search of the literature uncovered no studies that have examined commercials within a full episode of a TV show, which is surprising because this is how viewers encounter commercials in their daily lives. To help remedy this lack of ecological validity in the literature, this study presented objectifying commercials during a popular, full-length television show.

Finally, the literature search resulted in no studies examining the media's effect on body satisfaction that included a follow-up. Thus, this study sought to extend the existing literature by including a two-week follow-up. The purpose of such a follow-up was to determine if the intervention was effective beyond just the day of exposure to the intervention.

To test the warning message intervention, participants were divided into three groups: objectifying commercials with no warning message (Objectifying condition), objectifying commercials with warning message (Warning condition), and neutral commercials (Neutral condition). Participants in all three conditions watched the same

episode of *The Office* with embedded selected commercials. Participants' baseline body satisfaction scores were compared with their body satisfaction scores after watching the video.

Hypotheses

With the results of Slater and colleagues' (2012) study in mind, the first hypothesis is that after exposure to the television show with embedded commercials, body satisfaction will decrease for those in the Objectifying condition, remain stable for those in the Neutral condition, and increase for those in the Warning condition.

Overwhelmingly, the media sends the message that a woman's physical appearance is the most important aspect of her life; in contrast, the media implies that physical appearance is only one facet of a man's life, and his job, resources, and intelligence are equally important (Media Education Foundation, Jhally, 2010). Given this predominant message, the second hypothesis is that, in the Objectifying condition, females will experience a greater decrease in body satisfaction compared to males.

Further, Johnson and colleagues (2007) demonstrated that exposure to objectifying images of females leads to feelings of anxiety and hostility among men. Drawing from this finding, the third hypothesis is that participants in the Objectifying condition will experience an increase in negative affect from baseline (Time 1) to post-test (Time 2). However, this increase will be significantly greater for males as compared to females.

The fourth hypothesis is that participants in the Objectifying condition will be significantly more satisfied with their bodies at follow-up (Time 3) compared to the other two groups. Because media exposure will continue between the experiment and Time 3,

the hope is that the exposure to the warning message will serve to change the way participants view the media, thus protecting them from the negative effects previously discussed (e.g., body dissatisfaction) in the interim between video exposure and the follow-up assessment.

CHAPTER III

METHOD

Participants

Participants were Indiana University of Pennsylvania students recruited through the Psychology 101 online research participation system. Participants of any racial or ethnic background who were 18-years of age or older were allowed to participate. Data were collected from 290 participants at baseline (Time 1), 177 at post-test (Time 2), and 57 at a 2-week follow-up (Time 3). Attempts were made to recruit an approximately equal number of males and females. At Time 1, 138 males, 151 females, and 1 transgender individual participated. At Time 2, 75 males, 101 females, and 1 transgender individual participated. At Time 3, 27 males, 29 females, and 1 transgender individual participated. Because only 1 transgender individual participated, thus not allowing for accurate comparisons, this participant was removed from all analyses. Average age at Times 1, 2, and 3 were 19.3 (SD=3.6), 19.3 (SD=3.6), and 18.9 (SD=1.9), respectively. The majority of participants at all three Times were Caucasian: 76.9% at Time 1, 75.1% at Time 2, and 71.9% at Time 3. Further breakdown of demographic frequencies by time and condition are displayed in Appendix A.

Design

The study had three phases. At Time 1, participants completed an online survey to collect baseline information. At Time 2, participants took part in a high-impact laboratory experiment that involved watching a TV show with embedded commercials, and then completed a post-test survey. At Time 3, participants completed a follow-up online survey.

The study had one between-participants independent variable, Commercial Type, and it included three conditions. In the Neutral condition, participants watched the show with neutral commercials. In the Objectifying condition, participants watched the show with objectifying commercials and no warning message. In the Warning condition, participants watched the show with objectifying commercials with a preceding warning message.

At all three time points, participants completed the five study measures, which are presented next.

Measures

The measures that were used include the *Body Esteem Scale* (BES; Franzoi & Shields, 1984; Appendix E), the *Positive and Negative Affect Scale* (PANAS; Watson, Clark, & Tellegan, 1988; Appendix F), the *Zung Self-Rating Depression Scale* (Zung, 1965; Appendix G), the *Physical Appearance Comparison Scale* (PACS; Thompson, Heinberg, & Tantleff, 1991; Appendix H), and the *Sociocultural Attitudes Towards Appearance Scale – 3* (SATAQ-3; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2003; Appendix I). Finally, a demographics questionnaire (Appendix D) asked participants about their age, height, weight, gender, year in school, ethnicity, sexuality, relationship status, and amount of media consumption. Descriptions and psychometric properties of the measures are provided below. Means for each measure at each time point are presented in Tables 20, 21, and 22 (Appendix A).

Body Satisfaction

The BES (Franzoi & Shields, 1984) is a 35-item measure that assesses overall satisfaction with one's body. It uses a 5-point Likert-type scale with responses ranging

from *have strong negative feelings* to *have strong positive feelings.* Scores range from 35-175, with higher scores indicating greater body satisfaction. The measure can be used as a whole or broken down into three subscales for men and three subscales for women. The subscales for men are: physical attractiveness, upper body strength, and physical condition. The subscales for women are: sexual attractiveness, weight concern, and physical condition. Franzoi (1994) found that the subscales of the BES range from acceptable to very good test-retest reliability. Specifically, test-retest reliability for the male subscales physical attractiveness, upper body strength, and physical condition were r = .58, .75, and .83, respectively. Test-retest reliability for the female subscales sexual attractiveness, weight concern, and physical condition were r = .81, .87, .75, respectively. Franzoi & Herzog (1986) found that overall the measure is a valid multidimensional measure of body satisfaction, as the subscales significantly correlated with the Body Consciousness Questionnaire (BCQ). The BCQ assesses individuals' public and private body-consciousness (i.e., awareness of observable aspects of the body and internal sensations, respectively) and has been shown to be correlated with other established body image measures, providing evidence for its convergent validity (Miller, Murphy, & Buss, 1981). Despite the reliability of the subscales, the total score was utilized for this study, as the interest was concerning overall body satisfaction. One potential problem with this is the fact that a literature review revealed no studies that have examined the reliability and validity of this scale's total score. However, the scale, as a whole, demonstrated good internal consistency at all three time points in the present study (α = .95, .94, and .96).

Negative Affect

The PANAS (Watson et al., 1988) is a 20-item measure that assesses an individual's current positive and negative affect. It uses a 5-point Likert-type scale with responses ranging from *very slightly or not at all* to *extremely.* Scores range from 10-50 for both the positive affect subscale and the negative affect subscale, with higher scores indicating greater levels of positive and negative affect, respectively. Watson et al. found that, when assessing the current moment, both the positive and negative subscales demonstrated good internal consistency (α = .89, .85, respectively). Further, they found that both of the PANAS subscales were sufficiently correlated with other brief measures of affect, attesting to their construct validity. The subscales, positive and negative affect, demonstrated good internal consistency at all three times (α = .91, .89, and .87; .86, .82, and .86, respectively).

Depression

The *Zung Self-Rating Depression Scale* is a 20-item measure that assesses an individual's current level of depression. It uses a 4-point Likert-type scale with responses ranging from *a little of the time* to *most of the time*. Scores range from 20-80, with most depressed individuals scoring in the 50-69 range (Zung, 1965). Tanaka-Matsumi and Kameoka (1986) found that the Zung Self-Rating Depression Scale is a reliable measure (α =.81). They also found that the measure is valid as it correlated highly with other measures of depression, such as the Beck Depression Inventory (r =.68). In this study, the scale demonstrated good internal consistency at all three times (α = .82, .83, and .79).

Social Comparison

The PACS (Thompson et al., 1991) is a 5-item measure that assesses the extent to which participants compare themselves with others. It uses a 5-point Likert-type scale with responses ranging from *never* to *always*. Scores on this measure range from 5-25, with higher scores indicating more frequent comparison of one's physical appearance to others. In a pilot test with 80 females, Thompson and colleagues found that the measure had good overall reliability (α =.78) and good test-retest reliability (r =.72). They also validated the measure by determining that it was sufficiently correlated with other related variables including body dissatisfaction, eating disturbances, and self-esteem. Internal consistency at the three time points in this study were α = .62, .56, and .61.

Awareness and Internalization

The SATAQ-3 is a 30-item measure that assesses the extent of awareness and internalization of the thin and attractive societal ideal **(**Thompson et al., 2003**)**. It uses a 5-point Likert-type scale with responses ranging from *definitely disagree* to *definitely agree*. Scores on this measure range from 30-150, with higher scores indicating greater awareness and/or internalization of society's attractive ideal. The scale can be used as a whole or one or more subscales from it can be used separately. The four subscales that make up this measure are: Internalization-General, Information, Pressures, and Internalization-Athlete. In two studies Thompson, van den Berg, Roehrig, Guarda, and Heinberg (2004) found the measure and its subscales to be both reliable and valid. Cronbach's alpha levels ranged from 0.89-0.96 in both studies for the four subscales and the overall measure. Additionally, the measure demonstrated good convergent validity in both studies as it correlated significantly with the Body Dissatisfaction (r = .54 and .57,

respectively, $p<.01$) and Drive for Thinness ($r = .32$ and .49, respectively, $p<.01$) subscales of the Eating Disorders Inventory (EDI; Anderson et al., 2004). The EDI is an excellent measure for comparison as it is among the most frequently used self-report measures of eating disorder symptomatology, and includes items that assess awareness and internalization. Further, it adequately assesses such central domains of eating disorders as body image disturbance, self-esteem, and interpersonal problems. For this study, only the Internalization-General score was utilized, as the extent that participants have internalized media messages was the variable of interest. The subscale, Internalization-General, demonstrated good internal consistency in this study at all three times ($\alpha = .90, .90$, and .90).

Procedure

Task Development

An episode of the television sitcom, *The Office*, was selected because of its popularity and lack of prevalent or obvious conformity to the thin and attractive ideal. Other shows considered included *Friends, Big Bang Theory,* and *Modern Family*; however, because of frequent emphasis on characters who fit the thin and attractive ideal, these shows were not selected. The plot of the selected episode was:

> Michael Scott, regional manager of the Scranton branch of Dunder Mifflin, introduces a visiting documentary crew to his employees, who include Jim Halpert, a competent but unmotivated sales representative; Dwight Schrute, his petty and power-hungry co-worker; Ryan Howard, a new temporary employee; and Pam Beesly, the soft-spoken receptionist and object of Jim's flirtation. Jan Levenson-Gould, Michael's superior from corporate, arrives to inform Michael that the Scranton branch may be closed down. Michael immediately informs his employees that no one will be fired. Meanwhile, Dwight discovers that Jim has encased his stapler in Jell-O. Later in the day, Michael attempts to prank Pam by pretending to fire her for stealing Post-it notes. When Pam breaks down crying, Michael reveals the joke, but Pam is hardly amused. The episode ends with Jim putting Michael's "World's Best Boss" mug in Jell-O.

(http://en.wikipedia.org/wiki/Pilot_(The_Office)

Commercials of two types were gathered from Youtube and embedded within the TV show. In one version, the commercials depicted and objectified females who prescribe to the thin and attractive ideal and males who prescribe to the muscular ideal. These models were scantily clad and were engaging in sexualized behaviors or shown in sexualized contexts. In the other version, the commercials contained neutral content, such as household cleaning products, tissues, water filters, tires, paint, etc. These neutral commercials did not contain any real people, though three did contain animated characters. For a brief description of each commercial, see Appendix J. Commercials in each condition comprised approximately nine minutes of the 30-minute viewing time. There were 15 commercials in the Neutral condition and 13 commercials in the Objectifying and Warning conditions.

The purpose of embedding the commercials within the television show rather than just showing a series of commercials was to make the experience more natural. Individuals watching television at home do not watch only commercials. Instead, they watch a show, which contains commercial breaks. By embedding commercials within a full episode of a TV show, this study allowed a test of the hypothesis that even media that is not the primary focus of attention can have detrimental effects on body satisfaction.

Experimental Procedure

To obtain baseline scores, participants first completed an online survey. Participants first read an informed consent form (Appendix B) prior to beginning the survey and then saw the following message, "By clicking below to proceed with the study, you are indicating informed consent." Upon giving consent, participants completed the survey, which included all five of the study measures (BES, PANAS,

Zung, PACS, and SATAQ-3), as well as the demographics questionnaire. Questionnaires were presented in random order. After submitting their responses, participants were shown a debriefing form (Appendix K).

After taking the online survey, participants were able to sign up for a time to come into a large classroom and complete the second portion of the study. Participants took part in groups of 15-30. When they arrived at the classroom, a female experimenter met them and explained that they would watch a TV show and then complete a packet of questionnaires. Participants were provided with another informed consent form (Appendix C), which was signed and collected prior to beginning the study. Participants were divided into the Neutral, Objectifying, and Warning conditions, depending on the date that they participated. This phase was completed over three weeks (nine sessions) and the videos were played on a different day each week. Three sessions were devoted to each of the three conditions. All participants attending the same session were assigned to the same condition and watched the same video as it played on a large screen at the front of the room. Rather than completing this portion of the study individually, participants were run in groups because media is often viewed in the presence of others. Thus, it was believed that watching the video with other people would not cause a significant change in results.

The same commercials with objectifying, ideal individuals were used for both the Objectifying and Warning conditions. However, the warning message video began with the warning message, which was displayed for 10 seconds. The commercials selected for these groups contain an equal number of male and female models who fit society's body

ideals. The commercials selected for the neutral commercials (control) group contain no people and highlight non-appearance related products (e.g., cars, tissues, toilet paper).

In the Warning condition, the warning message was integrated into the video and was presented for ten seconds before the television show began. The message read: Warning: Many people in the media, for example those in commercials and print advertisements, have been airbrushed and photo-shopped to portray perfection. Because Slater and colleagues (2012) demonstrated that a generic warning label ("warning: these images have been digitally altered") was just as effective as a more detailed one, this study utilized a generalized message that could be easily applied to various forms of media. After watching the video, students remained in the classroom and completed the same five study measures (BES, PANAS, Zung, PACS, and SATAQ-3), which were again presented in random order. Upon completion of the second phase, participants were provided the same debriefing form that was provided after phase one (Appendix K). The full debriefing form (Appendix L) was not provided until the completion of the study in order to ensure that the information provided did not influence phase two or three responses.

Students who completed the second phase of the study were eligible to sign up for an online follow-up survey two weeks after data collection had ended for phase two. Thus, participants completed phase three between two and five weeks later. The follow-up survey included the same five measures, which were presented in random order. The consent procedure was the same for this phase as for phase 1. That is, participants first read an informed consent form (Appendix B) prior to beginning the survey and then saw the following message, "By clicking below to proceed with the study, you are indicating

informed consent." Participants who completed any phase of the study were provided with the full debriefing form (Appendix L) after the study was complete.

In order to match the Time 1, Time 2, and Time 3 scores, students selected an ID number at baseline, which they then put on their experimental and follow-up questionnaires. To ensure that students remembered their ID number, it was in the form of: the last letter of their first name, the last two digits of their phone number, and their two digit birth month (e.g., a4902). This strategy allowed participants' responses to remain anonymous.

Hypotheses

Primary Hypotheses

The first primary hypothesis is that after exposure to the TV show, body satisfaction will decrease for those in the Objectifying condition, remain stable for those in the Neutral condition, and increase for those in the Warning condition. If this hypothesis is supported, BES scores will decrease from Time 1 to Time 2 for those in the Objectifying condition, remain stable for those in the Neutral condition, and increase from Time 1 to Time 2 for those in the Warning condition.

The second primary hypothesis is that within the Objectifying condition, females will experience a greater decrease in body satisfaction compared to males. If this hypothesis is supported, BES scores will decrease more for females than males from Time 1 to Time 2.

The third primary hypothesis is that within the Objectifying condition, participants will experience an increase in negative affect, with this increase being significantly greater for males. If this hypothesis is supported, in the Objectifying

condition PANAS negative affect subscale scores will increase more for males than females from Time 1 to Time 2.

Finally, the fourth primary hypothesis is that participants in the Warning condition will be significantly more satisfied with their bodies at Time 3 compared to the other two conditions. The answer to this question could help determine whether the warning message helped train participants to look at media in a more skeptical way. If this hypothesis is supported, BES scores will be significantly higher for participants in the Warning condition compared to the other two conditions at Time 3, disregarding preexisting variance in body dissatisfaction.

Secondary Hypotheses

The first secondary hypothesis is that viewing objectifying commercials with a warning message and viewing neutral commercials will increase positive affect, whereas viewing objectifying commercials with no warning message will decrease positive affect. If this hypothesis is supported, PANAS positive affect subscale scores will increase significantly from Time 1 to Time 2 for participants in the Warning condition and the Neutral condition, and they will decrease significantly from Time 1 to Time 2 for participants in the Objectifying condition.

The next secondary hypothesis is that viewing objectifying commercials with a warning message and viewing neutral commercials will decrease depressive symptoms, as measured by the Zung self-rating scale, whereas viewing objectifying commercials with no warning message will increase depressive symptoms. If this hypothesis is supported, Zung scores will decrease significantly from Time 1 to Time 2 for participants

in the Warning condition and the Neutral condition, and they will increase significantly from Time 1 to Time 2 for participants in the Objectifying condition.

The third secondary hypothesis is that both social comparison, as measured by the PACS, and internalization, as measured by the SATAQ-3, will be negatively correlated with body satisfaction, as measured by the BES, at Time 1 for participants in all conditions and at Time 2 only for participants in the Objectifying and Neutral conditions. This correlation is expected to remain significant at Time 3 for participants in the Objectifying and Neutral conditions, but not for participants in the Warning condition.

CHAPTER IV

RESULTS

Primary Hypothesis 1: After exposure to the TV show, body satisfaction will decrease for those in the Objectifying condition, remain stable for those in the Neutral condition, and increase for those in the Warning condition.

Body satisfaction scores were submitted to a 3 (Commercial Type: Neutral, Objectifying, Warning) X 2 (Timing: Time 1, Time 2) ANOVA with repeated measures on the second factor. No main effects or interaction emerged, *p*'s > .48. As predicted, body satisfaction remained stable for participants in the Neutral condition from Time 1 (M = 123.29) to Time 2 (M = 123.35; $p > .97$). Contrary to prediction, no change in body satisfaction occurred in the Objectifying condition between Time 1 (M = 122.27) and Time 2 (M = 123.00; $p > .67$) or in the Warning condition between Time 1 (M = 125.13) and Time 2 (M = 126.57; $p > .42$).

The null finding in the Objectifying condition was unexpected, considering previous literature supporting the assertion that exposure to media featuring objectified models has significant detrimental effects on viewers (e.g., Aubrey, 2006; Barlett et al., 2008; Cafri et al., 2005; Morry & Staska, 2001; Tiggemann & Slater, 2004). One such study utilized the same measure of body satisfaction, the BES, as the present study (Groesz et al., 2002). Perhaps the null finding in the Objectifying condition helps explain the null finding in the Warning condition. Since body satisfaction was not negatively affected following exposure to the objectifying material, there was nothing for the warning message to fix. This point will be further elaborated in the Discussion chapter.

Primary Hypothesis 2: Within the Objectifying condition, females will experience a greater decrease in body satisfaction compared to males.

Body satisfaction scores were submitted to a 3 (Commercial Type: Neutral, Objectifying, Warning) x 2 (Sex: Male, Female) x 2 (Timing: Time 1, Time 2) ANOVA with repeated measures on the third factor. A main effect of sex emerged, F (1, 170) = 8.50, p = .004, such that males (M = 129.22) demonstrated greater body satisfaction than females (M = 120.08). This finding converges with previous research that has also found greater body satisfaction among males than females (Altabe & Thompson, 1993). However, neither the main effect of condition nor the interaction between condition and sex were significant, p's > .53. Contrary to prediction, there was no significant difference in degree of change in body satisfaction from Time 1 to Time 2 between males and females in any condition, p > .78.

Primary Hypothesis 3: Within the Objectifying condition, participants will experience an increase in negative affect, with this increase being significantly greater for males.

Negative affect scores were submitted to a 3 (Commercial Type: Neutral, Objectifying, Warning) x 2 (Sex: Male, Female) x 2 (Timing: Time 1, Time 2) ANOVA with repeated measures on the third factor. A main effect of Timing emerged, such that scores significantly decreased from Time 1 (M = 18.14) to Time 2 (M = 15.38, p < .001). No other main effects or interactions emerged, p's > .11.

The hypothesis that viewing objectifying commercials would increase negative affect was informed by the work of Johnson et al. (2007), who found that males exposed to media featuring objectified females experienced a significantly greater increase in both

anxiety and hostility compared to those exposed to media featuring objectified males or neutral images. There was no "anxiety" item or scale included in the present study. Thus, the PANAS item "hostile" was examined by itself. Hostility scores were submitted to a 3 (Commercial Type: Neutral, Objectifying, Warning) x 2 (Sex: Male, Female) x 2 (Timing: Time 1, Time 2) ANOVA with repeated measures on the third factor. A main effect of Timing emerged, such that scores significantly decreased from Time 1 (M = 1.48) to Time 2 (M = 1.26, p = .002). No other effects were significant, p's > .38. Unlike Johnson et al.'s research, this study revealed an overall decrease in hostility, rather than an increase. This may be because the commercials were embedded within a humorous TV show. This point will be elaborated upon in the Discussion chapter.

Primary Hypothesis 4: Participants in the Warning condition will be significantly more satisfied with their bodies at Time 3 compared to the other two conditions.

To test this hypothesis an ANCOVA was performed using body satisfaction at Time 1 as a covariate, body satisfaction at Time 3 as the dependent variable, and condition as the independent variable. Results revealed that there was no significant difference in body satisfaction among conditions (p > .2). Therefore, the fourth primary hypothesis was not supported.

Secondary Hypothesis 1: Positive affect will increase in the Warning and Neutral conditions, but decrease in the Objectifying condition.

Positive affect scores were submitted to a 3 (Commercial Type: Neutral, Objectifying, Warning) x 2 (Sex: Male, Female) x 2 (Timing: Time 1, Time 2) ANOVA with repeated measures on the third factor. A main effect for positive affect emerged, such that between Time 1 and Time 2, scores significantly decreased from Time 1 (M =

33.51) to Time 2 ($M = 30.02$, $p < .001$). A main effect for sex also emerged, such that males ($M = 33.89$) endorsed significantly greater positive affect than females ($M = 29.65$, $p < .001$). Neither the main effect of group nor any of the interaction effects were significant, p's > .28. Thus, as predicted, positive affect decreased for participants in the Objectifying condition between Time 1 ($M = 32.79$) and Time 2 ($M = 28.07$; $p = .011$). Contrary to prediction, positive affect also decreased for participants in the Neutral condition between Time 1 ($M = 33.37$) and Time 2 ($M = 30.33$; $p < .001$) and in the Warning condition between Time 1 ($M = 34.40$) and Time 2 ($M = 31.68$; $p = .010$). It is surprising that positive affect decreased in all conditions, considering that participants' main task involved watching a humorous TV show.

Secondary Hypothesis 2: Depressive symptoms will decrease in the Warning and Neutral conditions, but they will increase in the Objectifying condition.

Depression scores were submitted to a 3 (Commercial Type: Neutral, Objectifying, Warning) x 2 (Timing: Time 1, Time 2) ANOVA with repeated measures on the second factor. A main effect for depression emerged, such that scores significantly decreased from Time 1 ($M = 38.37$) to Time 2 ($M = 36.85$, $p < .001$). However, neither the main effect of group nor the interaction between group and depression were significant, p's > .13. Despite depression scores decreasing over time for participants overall, there were no significant changes in depression scores across groups.

Because of this null effect, depression scores were submitted to an exploratory 3 (Commercial Type: Neutral, Objectifying, Warning) x 2 (Sex: Male, Female) x 2 (Timing: Time 1, Time 2) ANOVA with repeated measures on the third factor. Again, depression scores for participants overall decreased from Time 1 ($M = 38.19$) to Time 2

(M = 36.85, p < .001). The main effect of Commercial Type and the interaction between Commercial Type and Timing remained nonsignificant, p's > .19. Interestingly, the main effect of sex approached significance, p = .06. The trend was such that females (M = 38.53) endorsed greater depression than males (M = 36.30). This trend is consistent with Kessler et al.'s (2005) study, which found that females did exhibit higher depressive symptomatology than males.

Secondary Hypothesis 3: Both social comparison and internalization will be negatively correlated with body satisfaction at Time 1 for participants in all conditions. At Time 2, social comparison and internalization will be correlated with body satisfaction only for participants in the Objectifying and Neutral conditions, but not for participants in the Warning condition.

To test this hypothesis, correlations between social comparison and body satisfaction were performed (see tables 1-7). Results revealed that at Time 1, before participants were assigned to conditions, social comparison was negatively correlated with body satisfaction (r = -.252, p = .01). However, social comparison was not significantly correlated with body satisfaction for any condition at Times 2 or 3 (Objectifying condition, r = -.231, -.300; Neutral condition, r = -.163, -.038; Warning condition, r = -.098, -.419). Thus, the hypothesis that social comparison would be negatively correlated with body satisfaction at Time 1 was supported. The hypothesis that social comparison would not be correlated with body satisfaction for participants in the Warning condition at Time 2 and Time 3 was also supported. In contrast, the hypothesis that social comparison would be negatively correlated with body satisfaction

at Times 2 and 3 for participants in the Objectifying and Neutral conditions was not supported.

Additionally, correlations between internalization and body satisfaction were performed (see tables 1-7). Results revealed that at Time 1, internalization was negatively correlated with body satisfaction (r = -.305, p = .01). Internalization remained negatively correlated with body satisfaction for only the Objectifying condition at Time 2 (r = -.357, p = .01; Neutral, r = -.143; Warning, r = -.178). At Time 3, internalization was negatively correlated with body satisfaction for only the Warning condition (r = -.528, p = .05; Objectifying, r = -.279; Neutral, r = -.193). Thus, the hypothesis that internalization would be negatively correlated with body satisfaction at Time 1 was supported. Interestingly, the hypothesis that internalization would not be correlated with body satisfaction for the Warning group at Times 2 and 3 was only partially supported in that they were not correlated at Time 2 but were at Time 3 (Time 2: r = -.178; Time 3: r = -.528, p = .05). In contrast, the hypothesis that internalization would remain significantly negatively correlated with body satisfaction at Times 2 and 3 for participants in the Objectifying and Neutral conditions was only partially supported. That is, this correlation was only significant at Time 2 for participants in the Objectifying condition. It was not significant at Time 2 for the Neutral condition or Time 3 for either the Objectifying or Neutral conditions.

Table 1

Correlations at Time 1

	Social Comparison	Internalization	Body Satisfaction
Social Comparison	14.64 (3.64)		
Internalization	.518**	24.39 (8.59)	
Body Satisfaction	-.252**	-.305**	123.45 (23.92)

** Correlation is significant at the 0.01 level (2-tailed). Means and standard deviations are presented on the diagonal.

Table 2

Correlations at Time 2, Objectifying condition

	Social Comparison	Internalization	Body Satisfaction
Social Comparison	14.74 (2.97)		
Internalization	.611**	25.82 (8.39)	
Body Satisfaction	-.231	-.357**	123.00 (23.35)

** Correlation is significant at the 0.01 level (2-tailed). Means and standard deviations are presented on the diagonal.

Table 3

Correlations at Time 2, Neutral condition

	Social Comparison	Internalization	Body Satisfaction
Social Comparison	14.55 (3.63)		
Internalization	.638**	23.34 (8.34)	
Body Satisfaction	-.163	-.143	123.35 (21.59)

** Correlation is significant at the 0.01 level (2-tailed). Means and standard deviations are presented on the diagonal.

Table 4

Correlations at Time 2, Warning condition

	Social Comparison	Internalization	Body Satisfaction
Social Comparison	14.82 (3.92)		
Internalization	.545**	23.67 (9.10)	
Body Satisfaction	-.098	-.178	126.57 (19.77)

** Correlation is significant at the 0.01 level (2-tailed). Means and standard deviations are presented on the diagonal.

Table 5

Correlations at Time 3, Objectifying condition

	Social Comparison	Internalization	Body Satisfaction
Social Comparison	14.42 (3.56)		
Internalization	.744**	23.89 (9.19)	
Body Satisfaction	-.300	-.279	133.58 (27.97)

** Correlation is significant at the 0.01 level (2-tailed). Means and standard deviations are presented on the diagonal.

Table 6

Correlations at Time 3, Neutral condition

	Social Comparison	Internalization	Body Satisfaction
Social Comparison	14.59 (4.65)		
Internalization	.767**	25.06 (9.22)	
Body Satisfaction	-.038	-.193	119.71 (22.94)

** Correlation is significant at the 0.01 level (2-tailed). Means and standard deviations are presented on the diagonal.

Table 7

Correlations at Time 3, Warning condition

	Social Comparison	Internalization	Body Satisfaction
Social Comparison	15.30 (2.59)		
Internalization	.331	25.70 (8.14)	
Body Satisfaction	-.419	-.528*	119.63 (20.51)

** Correlation is significant at the 0.01 level (2-tailed). Means and standard deviations are presented on the diagonal.

Additional Analyses

Although not included in the hypotheses, analyses for Primary Hypotheses 1-4 as well as Secondary Hypotheses 1-2 were performed using Time 3 data to test for the possibility of delayed effects. All analyses yielded null effects. These results are not reported on further due to low power from the high attrition rate over the course of the study.

In addition, exploratory analyses considering relationship status were performed. Specifically, Time 2 depression, positive affect, and body satisfaction scores were each

submitted to a 3 (Commercial Type: Neutral, Objectifying, Warning) x 2 (Sex: Male, Female) x 2 (Relationship Status: No, Yes) ANOVA. Regarding depression, a main effect of relationship status emerged, F (1, 163) = 4.31, p = .040, such that participants who were in a committed relationship (M = 35.92) endorsed significantly lower levels of depression than those who were not (M = 37.53).

When exploring positive affect, main effects of both sex and relationship status emerged. In regards to sex, results revealed that males (M = 31.32) endorsed significantly greater positive affect than females (M = 28.82), F (1, 163) = 4.47, p = .036. In regards to relationship status, results revealed that participants who were in a committed relationship (M = 31.47) endorsed greater positive affect than those who were not (M = 28.67), F (1, 163) = 5.94, p = .016. Further, an interaction between commercial and sex on positive affect also emerged, F (2, 163) = 3.03, p = .051. Upon examining the simple main effects, results revealed that males' positive affect differed significantly by commercial type, F (2, 169) = 4.43, p = .013. Specifically, males in the Objectifying condition (M = 27.93) endorsed significantly lower positive affect than males in both the Neutral (32.72, p = .016) and Warning (M = 33.31, p = .008) conditions. There was no difference in positive affect between males in the Neutral (M = 32.71) and Warning conditions (M = 33.31, p = .987). In contrast, females' positive affect did not differ by commercial type, F (2, 169) = .424, p = .655.

Finally, an interaction between sex and relationship status on body satisfaction emerged, F (1, 163) = 4.17, p = .043. Results revealed that females who were in a committed relationship (M = 127.14) endorsed significantly greater body satisfaction than females who were not (M = 120.40), F (1, 171) = 5.93, p = .016. In contrast, body

satisfaction did not differ for males according to whether they were in a committed relationship (M = 123.49) or not (M = 125.60), F (1, 171) = .417, p = .519.

CHAPTER V

DISCUSSION

Many studies have demonstrated that exposure to media featuring society's body ideal (i.e., thin females and muscular males) leads to lower satisfaction with one's body (e.g., Altabe & Thompson, 1993; Dittmar & Howard, 2004; Tiggemann & Slater, 2004; Want et al., 2009). However, a promising study conducted in Australia in 2012 by Slater and colleagues showed that pairing such media content with a warning label, which highlighted the fact that images are altered and do not represent reality, can buffer against the typical negative effects of such exposure on participants' body satisfaction. Because of the previously established association between objectifying media and lowered body satisfaction and the potential for a relatively easy intervention to lessen or eliminate negative consequences of such media exposure, the current study sought to add to the literature in several ways.

First, the primary goals of the study were to conceptually replicate the findings of Slater et al. (2012) in a new domain (TV as opposed to print media) and extend these results to male participants. Additionally, in order to increase ecological validity, commercials were embedded within a popular and relatively appearance-neutral television show. Next, because few studies have compared men and women using the same experimental manipulation, this study sought to explore the differences between males' and females' body satisfaction and affect following exposure to the experimental media presentation. Finally, this study sought to further extend the findings of Slater et al. by including a 2-week follow-up survey to examine the duration of the effectiveness of the warning message and the possibility of a delayed effect.

Despite previous literature guiding this study's hypotheses, most were not supported. First and foremost, body satisfaction did not change from Time 1 to Time 2 in any of the conditions. Surprisingly, objectifying commercials did not have the expected damaging effect on participants' body satisfaction. Thus, the added warning message was unnecessary in counteracting this predicted negative effect. Therefore, the results did not replicate Slater et al.'s finding that the addition of a warning can buffer against the negative effects of objectifying media.

It was expected that in the objectifying condition, females would experience a significantly greater decrease in body satisfaction from Time 1 to Time 2 compared to males. Unexpectedly, neither males nor females responded to the objectifying images with a decrease in body satisfaction. However, results did provide support for the assertion that females experience greater dissatisfaction with their bodies compared to males in general. This finding replicates the results of Altabe and Thompson (1993). This was true regardless of condition or experimental time point. In all three conditions, females expressed greater body dissatisfaction than males at baseline, post-test, and follow-up.

Further, this study was unable to replicate the finding that anxiety and hostility increased for male participants following exposure to objectifying female images (Johnson et al., 2007). Rather, results revealed no significant change in negative affect or hostility for males or females in any of the conditions. In a similar vein, there was no significant change in depression scores for males or females in any of the conditions.

It was expected that positive affect would increase following exposure to the objectifying commercials with a warning message and the neutral commercials, but that

positive affect would decrease following exposure to the objectifying commercials with no warning message. A portion of this hypothesis was supported. As expected, positive affect did decrease for individuals who viewed objectifying commercials with no warning message. Unexpectedly, however, positive affect also decreased for participants who viewed neutral commercials and those who viewed objectifying commercials with a warning message. Therefore, it is unclear whether the objectifying commercials contributed to this change in positive affect for those who were not shown the warning message. Though not included in the hypothesis, an interesting finding emerged from this analysis. That is, regardless of condition, males endorsed significantly greater levels of positive affect compared to females.

Although not included in the hypotheses, analyses for Primary Hypotheses 1-4 as well as Secondary Hypotheses 1-2 were performed using Time 3 data to test for the possibility of delayed effects. All analyses yielded null effects, which could be the result of low power from the high attrition rate over the course of the study. In addition, exploratory analyses considering relationship status were performed and interesting results emerged. Specifically, results from these additional analyses revealed that regardless of condition, compared to participants not in a committed relationship (as reported at Time 2), those in a committed relationship endorsed greater positive affect and lower depression. Additionally, females in a committed relationship endorsed significantly greater body satisfaction compared to females not in a committed relationship. A review of the literature yielded studies that examined the connection between relationship satisfaction and body satisfaction; however, no studies exploring the connection between relationship status and body satisfaction were identified. Further,

even the studies that explored relationship satisfaction and body satisfaction, none of these included any aspects of media exposure. Due to the unique consideration of relationship status, body satisfaction, and media exposure, this study does add to the literature in this area. Based on these findings and the lack of published research, this factor should be further explored as a potential buffer against the negative effects of exposure to objectifying media.

There are many studies demonstrating the negative effect of media exposure on participants' body satisfaction (e.g., Altabe & Thompson, 1993; Dittmar & Howard, 2004; Tiggemann & Slater, 2004; Want, Vicker, & Amos, 2009), but the current study did not replicate these findings. Instead, the present results indicated no change in body satisfaction after watching objectifying commercials, even in the absence of a warning message. Therefore, this study did not allow a test of the effectiveness of the warning message at counteracting the damaging influence of objectifying commercials. Thus, it will be important moving forward for future studies to further investigate the effectiveness of adding warning labels or messages when exposing participants to objectifying media. Additionally, because this was the first study to include males in this regard, future studies should continue utilizing male and female participants in an attempt to extend the Slater et al. (2012) finding to males and to allow for further sex comparisons.

Despite the lack of support for the majority of this study's hypotheses, the primary null effect, that exposure to objectifying commercials did not cause a significant reduction in body satisfaction, is meaningful and a potential reason for optimism. First, however, it will be necessary to determine what factor(s) made the difference. That is,

what was it about the experimental manipulation that counteracted the previously established negative effect of objectifying advertisements on body satisfaction?

There are several potential reasons for these null effects, one being that the commercials selected for the Objectifying and Warning conditions were not objectifying enough or that the men and women depicted in them did not conform to body ideals enough to produce a decrease in viewers' body satisfaction. This is unlikely, however, considering the care taken to select objectifying images of men and women who embody physical ideals (see Appendix J for a brief description of each commercial). It is also possible that participants simply tuned out the commercials and solely paid attention to the television show. If this is the reason for the null effects, any television show could have been used to eliminate the negative effect of the objectifying commercials. Most previous research has shown commercials to participants without a surrounding TV show (e.g., Birkeland et al., 2005; Heinberg & Thompson, 1995; Richins, 1991); quite unlike the way people are exposed to commercials in their everyday lives. One of the goals of the current research was to increase the ecological validity of research in this area by embedding commercials within a popular TV show. If participants were distracted by the TV show and did not attend to the commercials, this may offer a reason for optimism for those who are concerned about the potential negative impact of commercials on viewers (although not for advertisers), as people typically watch commercials in the context of a surrounding TV show. Future research should examine the extent to which participants attend to commercials by asking them to recall the content of the commercials they saw.

There are additional possibilities when considering the particular television show selected for this experiment. First, it is possible that interspersing the commercials with a

non-appearance related show, one that focuses more on the interactions among co-workers than on the way one looks, was enough to counteract the objectifying message of the commercials. This show may convey the message that appearance is not the sole focus in life and that people with a variety of body types can be worthwhile. If participants received that message from watching the show, it is understandable that their body satisfaction would have withstood the objectifying commercials.

It is also possible that the comedic nature of the TV show allowed participants to take the commercials less seriously, or that it improved participants' mood, which then buffered against the typical negative effects of exposure to objectifying media. Although positive affect decreased from Time 1 to Time 2, depressive symptoms also decreased, suggesting that this may be a possibility.

Third, the variety of body types presented in the show could have also played a role in downplaying the idealized body types presented in the objectifying commercials. Even if participants felt less attractive than the idealized images depicted by the commercials, they may have felt more attractive than some of the characters on the show. Coupling the upward social comparisons to the objectifying commercials with downward social comparisons to the show's characters may have produced stability in body satisfaction scores.

Additionally, it is possible that the non-threatening nature of the characters in the show (e.g., nice, dorky, not competent) did not present a threat to participants' sense of self. That is, by focusing on these characters, participants may have been reminded that not everyone fits into society's mold of the "ideal person." Further, the show may have also reminded them that one does not need to be the most attractive, most successful, or

most affluent person in order to be gainfully employed and make friends. Thus, this show and its characters may have allowed participants to ignore the pressure of society's idealized beauty message presented in the commercials.

A final potential explanation relates to the setting in which this study occurred. That is, participants watched the television show in a classroom with other students, many or all of whom they did not know. This could have resulted in participants' attention being more directed at the other students and/or discomfort with being in a room with unfamiliar others. Thus, it is possible that if participants watched alone, or in groups of friends, the hypotheses would have been supported. Although research that had participants watch in groups has shown a decrease in body satisfaction after exposure to ideal body types (e.g. Agliata & Tantleff-Dunn, 2004; Cattarin, Thompson, Thomas, & Williams, 2000; Hargreaves & Tiggemann, 2002), a literature review uncovered no research to support the above explanation, as no studies that had participants watch alone or in groups of friends were found. Although these are all potential reasons for the unexpected null effect of objectifying commercials on body satisfaction discovered in this research, future studies will be necessary to say with more confidence which explanation is most likely.

Regardless of the reason, the present research raises questions about the meaningfulness of previous research showing that objectifying advertisements increase body dissatisfaction. If embedding objectifying commercials into a television show does not have the same detrimental effects as simply exposing participants to commercials, it is possible that any show, not just *The Office*, would serve as a buffer. Thus, the results

of this study serve as a call to future researchers to continue exploring the potential buffering effects of embedding commercials into television shows.

Future Research Directions

A considerable literature indicates that objectifying media reduces body satisfaction (e.g., Barlett, Vowels, & Saucier, 2008; Bessenoff, 2006; Cattarin, Thompson, Thomas, & Williams, 2000; Hargreaves & Tiggemann, 2009; Hobzo & Rochlen, 2009; Tiggemann & Slater, 2004). As objectifying media is unlikely to disappear anytime soon, it is imperative to continue searching for approaches to reduce the negative impact of these messages. The current research was inspired by Slater et al. (2012) who found that a warning message counteracted the negative effects of objectifying media. Future research should continue to investigate this possibility. In particular, the literature would benefit from new studies that include both male and female participants, and studies that vary the medium in which the objectifying images are displayed. Additionally, future studies should attempt to discover whether body satisfaction is influenced by the presence of attractive others. Although a study by Sperry, Thompson, Roehrig, and Vandello (2005) revealed that communicator weight status (overweight, underweight, normal weight) did not have an influence on participants' body satisfaction, no studies exploring the influence of fellow participants were found.

The present research may have also highlighted an effective buffer that has not been investigated previously: the content that surrounds the objectifying advertisements. Future research should investigate whether something in particular about the TV show used here explains the null effect of objectifying images on body satisfaction that

emerged. Potential future studies to determine what is most effective in buffering against the negative effects of objectifying media could include the following. Studies could attempt to replicate the current study's findings by surrounding objectifying material with things that make most people feel happy (e.g., pictures/videos of baby animals) versus material that does not have an impact on mood (e.g., pictures/videos of toilet paper) or material that makes most people feel negatively (e.g., pictures/videos of homeless animals). By doing so, such a study could examine the potential buffering role of positive affect. To determine if the comedic nature of the show played a role in this study's results, future studies could utilize the same objectifying commercials for all conditions but change the show with one show being funny and another being serious. Future research could also attempt to discover if showing a variety of body types matters by utilizing one show that features both ideal body types and more average body types and comparing this to a show that only features ideal body types. Finally, to determine if the non-threatening, relatable nature of the show's characters contributed to the results, future studies could show some participants a show with similar characters while showing others a show with more threatening, non-relatable characters. Such threatening, non-relatable characteristics could include, but are not limited to, individuals who fit the thin/muscular and attractive ideal, successful businesspeople, or individuals in the upper class. Studies such as these could add to the literature by highlighting potential effective interventions and by providing support for a more healthy way of viewing media. Regardless of the exact intervention, research that embeds commercials with television shows should be pursued.

The current study attempted to lengthen the timeframe for examining the effects of objectifying media by including a 2-week follow-up survey. Future studies could go much further in this regard. Not only could measurements be repeated at various time points, but so could the intervention. In particular, future research could utilize a longitudinal design and expose participants to warnings multiple times over a longer period of time to determine if this is more effective than a single exposure. Given that it would be difficult to manipulate the media in this way, one potential real-world intervention could utilize a phone application that sends participants a daily reminder of the common manipulation of media images.

Limitations

This study suffers from many of the same limitations as the large majority of literature in this area. Future research should attempt to remedy these limitations in order to improve the generalizability of results. First, participants were recruited via convenience sampling (from psychology courses), which could limit the generalizability of the findings. Future studies in this area should attempt to recruit participants from a variety of courses offered to college students or utilize participants not attending college, which could also add greater diversity in age. Additionally, because research participants in this literature are primarily Caucasian, it is unclear whether individuals from other ethno-cultural or racial backgrounds are affected by exposure to the media in the same way. Future studies should attempt to include a variety of racial backgrounds, which would allow for statistical comparisons and would increase the generalizability and applicability of findings.

Specific to the current study, the attrition rate between Times 1 and 2 (39%), 2 and 3 (67.8%), and 1 and 3 (80.4%) was higher than expected and desired, which could have adversely affected the results. Such attrition could have altered the results for a variety of reasons. For example, it is possible that there was a delayed effect of the warning message, yielding an increase in body satisfaction at the 2-week follow-up. However, because only 32.2% of participants who completed Time 2 measures also completed Time 3 measures, the statistical power is not sufficient to offer a true test of this possibility.

Despite these limitations, the present study included several design elements that are worth noting. First, the experimental design allowed for between group comparisons, which would not have been possible without the experimental manipulation. An additional strength is the fact that embedding commercials into a television show rather than just showing a series of commercials increased this study's ecological validity. Finally, despite the high attrition rate and the lack of support for the hypotheses, another strength of this study is the inclusion of a follow-up survey, as few studies in the body satisfaction literature have included this component. In order to determine what changes to media (e.g., warning message, inclusion of a variety of body types) would be most effective in reducing the negative impact on body satisfaction, researchers in the field should consider conducting more experimental and randomized-control studies, attending to the ecological validity of their study designs, and assessing the long-term effects of their approaches.

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Appendix A

Tables

Table 8

Mean Age at Times 1, 2, and 3

Time	Participants	Mean	Minimum	Maximum
1	290	19.3	18	47
2	177	19.3	18	47
3	57	18.3	18	27

Table 9

Frequencies at Time 1

Variable	Level	Participants	Percentage
Year	Freshman	211	72.8
	Sophomore	50	17.2
	Junior	26	9
	Senior	2	0.7
	Other	1	0.33
Sex	Male	138	47.6
	Female	151	39.7
	Transgender	1	0.3
Sexuality	Heterosexual	265	91.4
	Homosexual	15	5.2
	Bisexual	5	1.7
	Asexual	5	1.7
Ethnicity	Caucasian	223	76.9
	African American	23	7.9
	Native American	1	0.3
	Hispanic/Latino	16	5.5
	Asian	7	2.4
	Mixed Race	3	1
	Other	17	5.9
Relationship Status	No	175	60.3
	Yes	115	39.7

Table 10

Total Media Consumption at Time 1

Mean (Hours)	Standard Deviation	Minimum	Maximum
16.42	7.01	1	40

Table 11

Frequencies at Time 2

Variable	Level	Participants	Percentage
Year	Freshman	135	76.3
	Sophomore	25	14.1
	Junior	16	9
	Senior	0	0
	Other	1	0.6
Sex	Male	75	42.4
	Female	101	57.1
	Transgender	1	0.6
Sexuality	Heterosexual	160	90.4
	Homosexual	9	5.1
	Bisexual	3	1.7
	Asexual	5	2.8
Ethnicity	Caucasian	133	75.1
	African American	15	8.5
	Native American	1	0.6
	Hispanic/Latino	10	5.6
	Asian	3	1.7
	Mixed Race	3	1.7
	Other	12	6.8
Relationship Status	No	107	60.5
	Yes	70	39.5

Table 12

Frequencies at Time 3

Variable	Level	Participants	Percentage
Year	Freshman	42	73.7
	Sophomore	9	15.8
	Junior	5	8.8
	Senior	0	0
	Other	1	1.8
Sex	Male	27	47.4
	Female	29	50.9
	Transgender	1	1.8
Sexuality	Heterosexual	50	87.7
	Homosexual	2	3.5
	Bisexual	3	5.3
	Asexual	2	3.5
Ethnicity	Caucasian	41	71.9
	African American	6	10.5
	Native American	0	0
	Hispanic/Latino	3	5.3
	Asian	1	1.8
	Mixed Race	0	0
	Other	6	10.5
Relationship Status	No	39	68.4
	Yes	18	31.6

Table 13

Mean Age at Time 2

Condition	Participants	Mean	Minimum	Maximum
1	50	18.7	18	27
2	66	19.8	18	47
3	61	19.3	18	37

Table 14

Frequencies at Time 2, Neutral Condition

Variable	Level	Participants	Percentage
Year	Freshman	40	80
	Sophomore	5	10
	Junior	5	10
	Senior	0	0
	Other	0	0
Sex	Male	20	40
	Female	29	58
	Transgender	1	2
Sexuality	Heterosexual	47	94
	Homosexual	0	0
	Bisexual	2	4
	Asexual	1	2
Ethnicity	Caucasian	35	70
	African American	6	12
	Native American	0	0
	Hispanic/Latino	3	6
	Asian	1	2
	Mixed Race	1	2
	Other	4	8
Relationship Status	No	25	50
	Yes	25	50

Table 15

Frequencies at Time 2, Objectifying Condition

Variable	Level	Participants	Percentage
Year	Freshman	46	69.7
	Sophomore	12	18.2
	Junior	8	12.1
	Senior	0	0
	Other	0	0
Sex	Male	26	39.4
	Female	40	60.6
	Transgender	0	0
Sexuality	Heterosexual	57	86.4
	Homosexual	6	9.1
	Bisexual	1	1.5
	Asexual	2	3
Ethnicity	Caucasian	48	72.7
	African American	5	7.6
	Native American	1	1.5
	Hispanic/Latino	6	9.1
	Asian	2	3
	Mixed Race	1	1.5
	Other	3	4.5
Relationship Status	No	45	68.2
	Yes	21	31.8

Table 16

Frequencies at Time 2, Warning Condition

Variable	Level	Participants	Percentage
Year	Freshman	49	80.3
	Sophomore	8	13.1
	Junior	3	4.9
	Senior	0	0
	Other	1	1.6
Sex	Male	29	47.5
	Female	32	52.5
	Transgender	0	0
Sexuality	Heterosexual	56	91.8
	Homosexual	3	4.9
	Bisexual	0	0
	Asexual	2	3.3
Ethnicity	Caucasian	50	82
	African American	4	6.6
	Native American	0	0
	Hispanic/Latino	1	1.6
	Asian	0	0
	Mixed Race	1	1.6
	Other	5	8.2
Relationship Status	No	37	60.7
	Yes	24	39.3

Table 17

Frequencies at Time 3, Neutral Condition

Variable	Level	Participants	Percentage
Year	Freshman	15	83.3
	Sophomore	2	11.1
	Junior	1	5.6
	Senior	0	0
	Other	0	0
Sex	Male	8	44.6
	Female	9	50
	Transgender	1	5.6
Sexuality	Heterosexual	16	88.9
	Homosexual	0	0
	Bisexual	2	11.1
	Asexual	0	0
Ethnicity	Caucasian	13	72.2
	African American	2	11.1
	Native American	0	0
	Hispanic/Latino	0	0
	Asian	1	5.6
	Mixed Race	0	0
	Other	2	11.1
Relationship Status	No	9	50
	Yes	9	50

Table 18

Frequencies at Time 3, Objectifying Condition

Variable	Level	Participants	Percentage
Year	Freshman	14	73.7
	Sophomore	4	21.1
	Junior	1	5.3
	Senior	0	0
	Other	0	0
Sex	Male	8	42.1
	Female	11	57.9
	Transgender	0	0
Sexuality	Heterosexual	16	84.2
	Homosexual	1	5.3
	Bisexual	1	5.3
	Asexual	1	5.3
Ethnicity	Caucasian	14	73.7
	African American	2	10.5
	Native American	0	0
	Hispanic/Latino	3	15.8
	Asian	0	0
	Mixed Race	0	0
	Other	0	0
Relationship Status	No	16	84.2
	Yes	3	15.8

Table 19

Frequencies at Time 3, Warning Condition

Variable	Level	Participants	Percentage
Year	Freshman	13	65
	Sophomore	3	15
	Junior	3	15
	Senior	0	0
	Other	1	5
Sex	Male	11	55
	Female	9	45
	Transgender	0	0
Sexuality	Heterosexual	18	90
	Homosexual	1	5
	Bisexual	0	0
	Asexual	1	5
Ethnicity	Caucasian	14	70
	African American	2	10
	Native American	0	0
	Hispanic/Latino	0	0
	Asian	0	0
	Mixed Race	0	0
	Other	4	20
Relationship Status	No	14	70
	Yes	6	30

Table 20

Means and Standard Deviations of Study Measures, Time 1

Measure	Mean (Standard Deviation)
BES	123.45 (23.92)
PACS	14.64 (3.64)
SATAQ: Internalization	24.39 (8.59)
PANAS: Positive Affect	32.62 (8.78)
PANAS: Negative Affect	18.48 (6.69)
Zung	39.22 (8.51)

Table 21

Means and Standard Deviations of Study Measures, Time 2

Measure	Mean (Standard Deviation)		
	Neutral	Objectifying	Warning
BES	123.35 (21.59)	123.00 (23.35)	126.57 (19.77)
PACS	14.55 (3.63)	14.74 (2.97)	14.82 (3.92)
SATAQ: Internalization	23.39 (8.34)	25.82 (8.39)	23.67 (9.10)
PANAS: Positive Affect	29.63 (8.38)	28.14 (8.72)	31.54 (8.46)
PANAS: Negative Affect	15.16 (5.28)	15.79 (5.89)	15.19 (4.89)
Zung	36.82 (8.39)	37.86 (8.50)	35.87 (7.97)

Table 22

Means and Standard Deviations of Study Measures, Time 3

Measure	Mean (Standard Deviation)		
	Neutral	Objectifying	Warning
BES	119.71 (22.94)	133.59 (27.97)	119.63 (20.50)
PACS	14.59 (4.65)	14.42 (3.56)	15.30 (2.59)
SATAQ: Internalization	25.06 (9.22)	23.89 (9.19)	25.70 (8.14)
PANAS: Positive Affect	32.59 (7.05)	33.84 (9.09)	34.10 (6.87)
PANAS: Negative Affect	18.29 (5.59)	16.89 (6.52)	21.10 (6.36)
Zung	38.06 (7.71)	36.58 (8.40)	39.15 (7.78)

Table 23

Correlations between Total Media Consumption and Study Measures, Time 1

	Total Media Consumption
BES	-.027
PACS	.158**
SATAQ: Internalization	.145*
PANAS: Positive	.012
PANAS: Negative	.051
Zung	.070

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Table 24

Correlations between Total Media Consumption and Study Measures, Time 2

	Total Media Consumption		
	Neutral	**Objectifying**	**Warning**
BES	-.255	-.080	-.032
PACS	.287*	.011	-.022
SATAQ: Internalization	.332*	.121	-.103
PANAS: Positive	-.191	.021	-.022
PANAS: Negative	.078	.158	.140
Zung	.139	.044	.207

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Appendix B

Informed Consent Form A

Informed Consent

What is the purpose of this research?
The purpose of this research is to explore the relationship between various attitudes and behaviors and perceptions of the media.

What will be expected of me?
If you are a student and you are 18 years of age or older, you are eligible to participate in this study. First, you will be introduced to the study, including risks and benefits, and if you want to participate, you will give consent by proceeding prior to filling out the study survey. Participation is completely voluntary and you can decide to withdraw from the study at any time without penalty. If you consent to participation, you will receive 1/2 research credit. No other reward (monetary or otherwise) will be provided for participation. Next, you will be asked to fill out a packet of surveys. This will take approximately 30 minutes. Some people need more or less time, but we will ask you to please read each question carefully. Upon completing the survey and submitting your responses, you will be provided with a Debriefing Form that lists contact information for the researcher and appropriate resources.

How long with the research take?
Approximately 30 minutes

Will my answers be anonymous?
Your answers will remain confidential. Specifically, you will not be asked to provide your name or identifying information on the surveys. Your consent form is the only form that will have your name on it, and it will be separated from your survey packet. Your survey packet will have a participant number on it, but it will only be used to match your Phase 1, 2, and 3 surveys. The surveys and consent forms will be kept in separate files in a locked office. Your responses will not be linked to your name.

Is there any harm that I might experience from taking part in the study?
There is no risk of physical, legal, psychological, or social harm to participants. Other than transient emotional discomfort that you may experience as a result of reflecting on your attitudes and behaviors while filling out the surveys, every effort will be made to ensure your safety and well-being. Specifically, the experimenter will remain alert and you can ask questions at any time.

How will I benefit from taking part in the research?
In addition to the direct benefit of earning research credit toward a course, the potential benefits to participants include the opportunity to experience first-hand how researchers conduct surveys and gather information in this type of psychological research. You might also find it useful to reflect on your own experiences and perceptions as evoked by the

survey questions. Finally, your participation may ultimately inform clinicians, researchers, consumers, and the community at large regarding the relationships among study variables that are included in the surveys.

Who should I contact if I have questions or concerns about the research?
Contact Dr. Long, at the Department of Psychology at Indiana University of Pennsylvania, Indiana, PA 15701 (anson.long@iup.edu) or Audra Wagaman, M.A. at a.l.wagaman@iup.edu.

This research has been approved by Indiana University of Pennsylvania's Institutional Review Board for the Protection of Human Subjects (phone: 724-357-7730).

By clicking below to proceed with the study, you are indicating informed consent.

Appendix C

Informed Consent Form B

Informed Consent

What is the purpose of this research?
The purpose of this research is to explore the relationship between various attitudes and behaviors and perceptions of the media.

What will be expected of me?
If you are a student and you are 18 years of age or older, you are eligible to participate in this study. First, you will be introduced to the study, including risks and benefits, and if you want to participate, you will sign an informed consent form prior to filling out the study survey. This consent form will be collected prior to beginning the study in order to maintain your confidentiality. Participation is completely voluntary and you can decide to withdraw from the study at any time without penalty. If you consent to participation, you will receive 1 research credit. No other reward (monetary or otherwise) will be provided for participation. Next, you will be asked to watch a TV show and then fill out a packet of surveys. This will take approximately 45 minutes. Some people need more or less time, but we will ask you to please read each question carefully. Please do not put your name on any of the questionnaires – only on the consent forms! When you have completed the packet of questionnaires, you will return the packet form to the experimenter. When you return your questionnaire packet, you will also be given a Debriefing Form that further explains the purpose of the study and lists contact information for the researcher and appropriate resources.

How long with the research take?
Approximately 45 minutes

Will my answers be anonymous?
Your answers will remain confidential. Specifically, you will not be asked to provide your name or identifying information on the surveys. Your consent form is the only form that will have your name on it, and it will be separated from your survey packet. Your survey packet will have a participant number on it, but it will only be matched to the number on your consent form if you wish to be removed from the study and have your data/survey destroyed. The surveys and consent forms will be kept in separate files in a locked office. Your responses will not be linked to your name.

Is there any harm that I might experience from taking part in the study?
There is no risk of physical, legal, psychological, or social harm to participants. Other than transient emotional discomfort that you may experience as a result of reflecting on your attitudes and behaviors while filling out the surveys, every effort will be made to ensure your safety and well-being. Specifically, the experimenter will remain alert and you can ask questions at any time.

How will I benefit from taking part in the research?
In addition to the direct benefit of earning research credit toward a course, the potential benefits to participants includes the opportunity to experience first-hand how researchers conduct surveys and gather information in this type of psychological research. You might also find it useful to reflect on your own experiences and perceptions as evoked by the survey questions. Finally, your participation may ultimately inform clinicians, researchers, consumers, and the community at large regarding the relationships among study variables that are included in the surveys.

Who should I contact if I have questions or concerns about the research?
Contact Dr. Long, at the Department of Psychology at Indiana University of Pennsylvania, Indiana, PA 15701 (anson.long@iup.edu) or Audra Wagaman, M.A. at a.l.wagaman@iup.edu.

Where can I seek help for emotional or academic problems?
IUP Counseling Center in the Suites on Maple East (724-357-2621)
Indiana County Community Guidance Center (724-465-5576)

This research has been approved by Indiana University of Pennsylvania's Institutional Review Board for the Protection of Human Subjects (phone: 724-357-7730).

Name_____Signature_____Date: _____

Appendix D

Demographics Questionnaire

Demographics Questionnaire

1. Age (in years): _____
2. Please check your gender:

   Male _____ Female _____ Transgender _____
3. Please check your current year in school:

   Freshman _____

   Sophomore _____

   Junior _____

   Senior _____

   Other _____
4. Please check your ethnicity:

   Caucasian _____

   African American _____

   Native American _____

   Hispanic/Latino _____

   Asian _____

   Mixed Race _____

   Other _____
5. Please check your sexuality:

   Heterosexual _____ Homosexual _____

   Bisexual _____ Asexual _____
6. Are you in a committed relationship?

   No _____ Yes _____

7. On average, how much time do you spend watching/looking through each type of media PER WEEK?

Television (watched on a TV or through a website such as Netflix)

0 m	30 m	1 h	1.5 h	2 h	2.5 h	3 h	3.5 h	4 h	4.5 h	5 h	5.5 h	6 h	6.5 h	7 h	7.5 h	8 h

Movies (watched on a TV, through a website such as Netflix, or at a theater)

0 m	30 m	1 h	1.5 h	2 h	2.5 h	3 h	3.5 h	4 h	4.5 h	5 h	5.5 h	6 h	6.5 h	7 h	7.5 h	8 h

Radio

0 m	30 m	1 h	1.5 h	2 h	2.5 h	3 h	3.5 h	4 h	4.5 h	5 h	5.5 h	6 h	6.5 h	7 h	7.5 h	8 h

Magazines

0 m	30 m	1 h	1.5 h	2 h	2.5 h	3 h	3.5 h	4 h	4.5 h	5 h	5.5 h	6 h	6.5 h	7 h	7.5 h	8 h

Social Media

0 m	30 m	1 h	1.5 h	2 h	2.5 h	3 h	3.5 h	4 h	4.5 h	5 h	5.5 h	6 h	6.5 h	7 h	7.5 h	8 h

Appendix E

Body Esteem Scale

BES

On this page are listed a number of body parts and function. Please read each item and indicate how you feel about this part or function of your own body using the following scale:

1 = Have strong negative feelings
2 = Have moderate negative feelings
3 = Have no feeling one way or the other
4 = Have moderate positive feelings
5 = Have strong positive feelings

1. Body Scent _____
2. Appetite _____
3. Nose _____
4. Physical Stamina _____
5. Reflexes _____
6. Lips _____
7. Muscular Strength _____
8. Waist _____
9. Energy Level _____
10. Thighs _____
11. Ears _____
12. Biceps _____
13. Chin _____
14. Body Build _____
15. Physical Condition _____
16. Buttocks _____
17. Agility _____
18. Width of Shoulders _____
19. Arms _____
20. Chest or Breasts _____
21. Appearance of Eyes _____
22. Cheeks/Cheekbones _____
23. Hips _____
24. Legs _____
25. Figure or Physique _____
26. Sex Drive _____
27. Feet _____
28. Sex Organs _____
29. Appearance of Stomach _____
30. Health _____
31. Sex Activities _____
32. Body Hair _____
33. Physical Coordination _____
34. Face _____
35. Weight _____

Appendix F

Positive and Negative Affect Scale

PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. Indicate to what extent you feel this way **right now**, that is, **at the present moment.**

1 = Very Slightly or Not at All
2 = A Little
3 = Moderately
4 = Quite a Bit
5 = Extremely

1. Interested _____
2. Distressed _____
3. Excited _____
4. Upset _____
5. Strong _____
6. Guilty _____
7. Scared _____
8. Hostile _____
9. Enthusiastic _____
10. Proud _____
11. Irritable _____
12. Alert _____
13. Ashamed _____
14. Inspired _____
15. Nervous _____
16. Determined _____
17. Attentive _____
18. Jittery _____
19. Active _____
20. Afraid _____

Appendix G

Zung Self-Rating Depression Scale

Zung Self-Rating Depression Scale

Please read each statement and decide how much of the time the statement describes how you have been feeling during the past several days.

	A little of the time	Some of the time	Good part of the time	Most of the time
1. I feel down-hearted and blue				
2. Morning is when I feel the best				
3. I have crying spells or feel like it				
4. I have trouble sleeping at night				
5. I eat as much as I used to				
6. I still enjoy sex				
7. I notice that I am losing weight				
8. I have trouble with constipation				
9. My heart beats faster than usual				
10. I get tired for no reason				
11. My mind is as clear as it used to be				
12. I find it easy to do the things I used to				
13. I am restless and can't keep still				
14. I feel hopeful about the future				
15. I am more irritable than usual				
16. I find it easy to make decisions				
17. I feel that I am useful and needed				
18. My life is pretty full				
19. I feel that others would be better off if I were dead				
20. I still enjoy the things I used to do				

Appendix H

Physical Appearance Comparison Scale

PACS

Using the following scale please select a number that comes closest to how you feel:

Never = 1
Seldom = 2
Sometimes = 3
Often = 4
Always = 5

1. At parties or other social events, I compare my physical appearance to the physical appearance of others.
   1 2 3 4 5

2. The best way for a person to know if they are overweight or underweight is to compare their figure to the figure of others.
   1 2 3 4 5

3. At parties or other social events, I compare how I am dressed to how other people are dressed.
   1 2 3 4 5

4. Comparing your "looks" to the "looks" of others is a bad way to determine if you are attractive or unattractive.
   1 2 3 4 5

5. In social situations, I sometimes compare my figure to the figures of other people.
   1 2 3 4 5

Appendix I

Sociocultural Attitudes Toward Appearance Questionnaire-3

SATAQ-3

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

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

TV programs are an important source of information about fashion and "being attractive."	
I've felt pressure from TV or magazines to lose weight.	
I *do not* care if my body looks like the body of people who are on TV.	
I compare my body to the bodies of people who are on TV.	
TV commercials are an important source of information about fashion and "being attractive."	
I *do not* feel pressure from TV or magazines to look pretty.	
I would like my body to look like the models who appear in magazines.	
I compare my appearance to the appearance of TV and movie stars.	
Music videos on TV are *not* an important source of information about fashion and "being attractive."	
I've felt pressure from TV and magazines to be thin.	
I would like my body to look like the people who are in movies.	
I *do not* compare my body to the bodies of people who appear in magazines.	
Magazine articles are *not* an important source of information about fashion and "being attractive."	
I've felt pressure from TV or magazines to have a perfect body.	
I wish I looked like the models in music videos.	
I compare my appearance to the appearance of people in magazines.	
Magazine advertisements are an important source of information about fashion and "being attractive."	
I've felt pressure from TV or magazines to diet.	
I *do not* wish to look as athletic as the people in magazines.	
I compare my body to that of people in "good shape."	
Pictures in magazines are an important source of information about fashion and "being attractive."	
I've felt pressure from TV or magazines to exercise.	
I wish I looked as athletic as sports stars.	
I compare my body to that of people who are athletic.	

Movies are an important source of information about fashion and "being attractive."	
I've felt pressure from TV or magazines to change my appearance.	
I do not try to look like the people on TV.	
Movie stars are not an important source of information about fashion and "being attractive."	
Famous people are an important source of information about fashion and "being attractive."	
I try to look like sports athletes.	

Appendix J

Brief Description of Commercials

Neutral Commercials

- Lexus: depicts a car crashing through a wall of labeled bottles while a man (not shown) talks about fuel sources and the Lexus brand
- Charmin: animated red mother and son bears; son initially has toilet paper pieces stuck on his fur; woman talks about the Charmin brand being absorbent and leaving fewer pieces behind than other brands
- Pizza Hut: man (not shown) talking about Pizza Hut brand while showing various pizzas
- Office Max/GoDaddy.com: laptop displaying GoDaddy.com with miniature animals playing around the computer while a man (not shown) talks about the two brands
- Pistachios: Lucy holds a pistachio while Charlie Brown attempts to kick it but instead flips and cracks it open with his head
- Kaboom Oxi-Clean: woman talking about uses for the product while demonstrating its stain removing abilities in a bathroom; only the person's forearm and hand are shown
- Pretzel M&Ms: orange M&M and a pretzel looking at an advertisement for Pretzel M&Ms wearing glasses/mustaches as disguises
- Pur water filter: man (not shown) talking about faucet filter while demonstrating how it attaches
- Ortho Weed B Gon Max: man (not shown) talking about the product while demonstrating its use on a lawn
- Puffs Plus Lotion: animated children playing in the snow; mother brings Puffs to boy whose nose had been irritated by "regular" tissues; man talking about the brand throughout the commercial
- Crate & Barrel: white background with black words; music playing in the background
- Dairy Queen: man (not shown) talking about Dairy Queen products while they are shown
- Michelin tires: animated "evil gas pump" attacking a city while man (not shown) talks about how the correct tires can save money at the pump
- McDonald's: foods and drinks from the "under 400 calories menu" are displayed while a woman (not shown) speaks about the products
- Sherwin-Williams: outdoor scene animated using color samples while music plays in the background

Objectifying Commercials

- Snickers: thin, attractive women in bikinis washing cars while a man has a line of cars waiting for him to put mud on their cars; the women's movements are sexually suggestive
- Dolce and Gabbana: a muscular, attractive man wearing a white speedo and a thin, attractive woman wearing a white bikini jump into an ocean from a dock; the commercial plays in slow motion as each gets out of the water; they are then shown kissing and the man untying the woman's bikini top

- Calvin Klein: muscular, attractive man wearing briefs only moves in ways that highlight his arm and abdominal muscles
- JustFab.com: thin, attractive women looking at a computer while making comments that sound suggestive of a sexual encounter; the screen is then shown and a woman talks about the brand
- Victoria's Secret: thin, attractive woman modeling lingerie while music plays in the background
- J.C. Penney: attractive older man in a suit suggesting that people do not want to see advertisements; so that "everybody wins" he shows men modeling clothing on the right half of the screen and a thin, attractive woman in a bikini getting out of a pool and beginning to take her bikini top off in slow motion on the left half of the screen
- Wrangler: man is shown riding a horse and then doing activities that imply physical strength (e.g., lifting heavy objects) while male commentator suggests that their jeans work "as hard as you do"; much of the focus is on the man's backside
- Nair: thin, attractive women who are scantily clad dance (sexually suggestive movements) while a female commentator talks about the brand
- Guess: thin, attractive woman wearing jeans and a crop top moves in sexually suggestive ways; many of these movements are shown in slow motion
- Old Spice: muscular, attractive shirtless man talks to women suggesting that although their male partners are not him, they could smell like him
- Bud Light: large group of men and women stand near a spaceship; thin, attractive females wearing black leather outfits offer beer in exchange for men; the men are then shown running toward the spaceship
- Maybelline: thin, attractive, scantily clad women model while a female commentator talks about the make-up brand

Appendix K

Debriefing Form A

Debriefing Form

Thank you for participating in this study. The purpose of this research was to explore the relationship between a variety of attitudes and behaviors and perceptions of the media. More information regarding this study will be distributed via email at the end of the semester after the study has been completed.

If you have any questions or concerns regarding this study please feel free to contact:
Dr. Anson Long at: anson.long@iup.edu
Audra Wagaman at: a.l.wagaman@iup.edu

Appendix L

Debriefing Form B

Debriefing Form

Thank you for participating in this study. The media has been shown to influence how individuals feel about their bodies. More specifically, exposure to media images depicting women who are very thin and attractive and/or men who are attractive and muscular/toned tends to result in a decrease in body satisfaction (Agliata & Tantleff-Dunn, 2004; Cusumano & Thompson, 1997). This is particularly true for college students, as they are a population especially vulnerable to depression, social comparison, and body dissatisfaction. One purpose of this study was to explore the effects of exposure to objectifying and non-objectifying commercials on body satisfaction. The other purpose was to investigate whether the inclusion of a warning message (Warning: Many people in the media, for example those in commercials and print advertisements, have been airbrushed and photo-shopped to portray perfection) prior to exposure would serve as a buffer against the media's negative effect on body satisfaction.

If you would like to learn more about research on body satisfaction and related topics, please consider looking up the following articles:

Agliata, D., & Tantleff-Dunn, S. (2004). The impact of media exposure on males' body image. *Journal of Social and Clinical Psychology, 23(1),* 7-22.

Barlett, C. P., Vowels, C. L., & Saucier, D. A. (2008). Meta-analyses of the effects of media images on men's body-image concerns. *Journal of Social and Clinical Psychology, 27(3),* 279-310.

Bessenoff, G. R. (2006). Can the media affect us? Social comparison, self-discrepancy, and the thin ideal. *Psychology of Women Quarterly, 30*, 239-251.

Cusumano, D. L., Thompson, J. K. (1997). Body image and body shape ideals in magazines: Exposure, awareness, and internalization. *Sex Roles, 37(9/10),* 701-721.

Halliwell, E., & Dittmar, H. (2004). Does size matter? The impact of model's body size on women's body-focused anxiety and advertising effectiveness. *Journal of Social and Clinical Psychology, 23(1),* 104-122.

Media Education Foundation (Producer), & Jhally, S. (Director). (2010). Killing us softly 4: Advertising's Image of Women [Documentary]. (Available from Media Education Foundation, 60 Masonic St., Northampton, MA 01060)

Slater, A., Tiggemann, M., Firth, B., & Hawkins, K. (2012). Reality check: An experimental investigation of the addition of warning labels to fashion magazine images on women's mood and body dissatisfaction. *Journal of Social and Clinical Psychology, 31(2),* 105-122.

Thank you for your participation and if you have any questions or concerns regarding this study please feel free to contact:

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