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Attaining Idealized Status: Motivation to Diet and Exercise after Exposure to Women with Ideal

Body Types in Relationships

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Abstract

We examined if exposure to idealized images of women would impact women's perceptions of themselves and their likelihood of engaging in unhealthy behaviors. We used different images for conditions of idealized relationship status and body image. Participants completed this study in two parts. In the first part, they completed questionnaires to assess internalization of the idealized thin body image and feelings about the self. In the second part, participants were randomly assigned to one of four conditions. Participants saw a picture of a woman with or without an ideal body who was either with or without a male partner. After viewing one image, participants reported their desire to look like the model, feelings about themselves, and the length of time they felt motivated to exercise. Our results show that idealized images of women's bodies influence behaviors and feelings of women who have internalized idealized media images and have weight concerns. Specifically, after viewing a thin model, women who have internalized the thin ideal and those who have concerns about their weight reported greater desire to look like the model, felt worse about their bodies, and reported that they wanted to exercise for longer. Being exposed to idealized images of women in relationships did not influence women's motivation to engage in unhealthy behaviors or negative self-perception. These results add further support to previous research that demonstrates that media images impact how women feel about their bodies and can motivate women to engage in unhealthy behaviors to obtain idealized images.

Keywords: Idealized images, status, body image, relationships, motivation to diet and exercise

Attaining Idealized Status: Motivation to Diet and Exercise after Exposure to Women with Ideal
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I. Idealized Body Image and Media

1) Idealized Body Image

One purpose of this study is to demonstrate the relationship between exposure to idealized images in the media and body image. Body image disturbance and eating disorders have become a significant medical concern in Western nations, especially among female college students (Thompson & Stice, 2001). According to Yamamiya, Cash, Melnyk, Posavac, and Posavac (2005) body image is comprised of the subjective perceptions and attitudes relating to one's body and physical appearance. Today, individuals in Western cultures are commonly exposed to the "ideal body image" (Kilbourne, 1999). The ideal female body image represented in society today, is often portrayed as a thin, fit, and attractive model (Bissell & Rask, 2010). Although perceptions and attitudes regarding body image are measured through a variety of different methods, Bissell and Rask (2010) indicate that body image and perceived attractiveness in Western cultures is measured by how a woman's body image appears in comparison to others. Thus, through the processes of comparison and sociocultural pressures, women may compare themselves to idealized images seen in the media, develop a negative self-image, and engage in unhealthy behaviors to achieve the ideal body image and meet social expectations (Stice, Spangler, & Agras, 2001).

2) Negative Consequences of Exposure to Idealized Media Images on Body Image Concerns.

Research suggests a positive correlation between exposure to mass media featuring thin, beautiful, idealized women with various body image concerns and disturbances among women (Derenne, & Beresin, 2006; Fernandez, & Pritchard, 2012; Gabe, Ward, & Shibley Hyde, 2008;

Green & Pritchard, 2003; Van den Berg, Thompson, Obremski-Brandon & Coover, 2002; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2004). According to Van den Berg et al. (2002), body image concerns consist of thoughts, feelings, and behavioral responses related to one's body. For example, body image concerns are frequently demonstrated through body image dissatisfaction, and motivation to change one's body image or appearance (Grabe, et al., 2008). Media presents as an instrument, which propagates an idealized standard for body image for both men and women (Derenne & Beresin, 2006). Research indicates a correlation between exposure to images of the idealized female body and decreases in body image satisfaction (Grabe, et al., 2008; Green, Palladino, & Pritchard, 2003; Yamamiya et al., 2004) and restrained eating behaviors (Grabe et al., 2008; Green & Pritchard, 2003) among female participants. These relationships are particularly concerning due to changes in weight and negative body image satisfaction, all of which are suggested to lead to disordered eating behaviors among women (Derenne, & Beresin, 2006).

3) Theoretical Explanations for the Connection between Exposure to Idealized Body Image and Body Image Concerns.

The research cited above consistently demonstrates a positive correlation between exposure to idealized images of women and disordered thoughts and behaviors about their bodies. There are several theories relevant to the current study which help to explain why women who are exposed to media images of the thin ideal are more likely to have negative perceptions of themselves. In particular, we will focus on internalization of the thin ideal and social comparison theory to better understand the influence of exposure to idealized images on negative self-perception and the motivation to engage in weight loss behaviors.

a) Internalization of the thin ideal. Thompson and Stice (2001) suggest internalization of

the thin ideal as a significant risk factor for body image and eating disturbances. They further suggest that increased exposure to models with a thin and idealized body image may lead to a greater internalization of the thin ideal (Stice, Ziemba, Margolis, & Flick, 1996). Internalization refers to the psychological process of acquiring certain attitudes, beliefs, and perspectives (Moradi, Dirks, & Matteson, 2005). According to Thompson, Heinberg, Altabe, and Tantleff-Dunn (1999). An individual becomes susceptible to internalizing a societal ideal when there is the belief that through engaging in certain behaviors, they will successfully achieve certain characteristics of the societal ideal. Once the idealized image has been internalized, it can lead to body image disturbances, the desire to lose weight, and eating disorders (Fernandez & Pritchard, 2012; Fisher, Dunn & Thompson, 2002; Shisslak & Crago 2001; Thompson et al., 1999). In this study, we will examine how internalization of the thin ideal may lead to the motivation to engage in unhealthy eating and weight loss behaviors among undergraduate women.

b) Upward Social Comparison. Upward social comparison occurs when an individual compares themselves to those who possess attributes that are considered greater than that of the individual (Collins, 1996); upward social comparisons can be used to improve the self, (Collins, 1996) however, these comparisons can also result in decreased body image satisfaction, especially when upward social comparisons are made between the self and thin models often portrayed in media (Lew, Mann, Myers, Taylor, & Bower, 2007; Milkie, 1999; Tiggemann, & McGill, 2004). A study conducted by Tiggemann and Polivy (2010) suggests that after viewing thin, idealized models, women may report decreases in both body satisfaction and mood due to the engagement in upward social comparison between the self and the models. Tiggemann and McGill (2004) also suggest increased media exposure may also lead to an increased engagement in social comparisons, resulting in higher reports of body dissatisfaction and negative mood.

Thus, in the current study, women may make upward social comparisons, compare themselves to models with the thin ideal and report lower levels of body image satisfaction.

Although research suggests that upward social comparisons may be a mechanism for the negative implications of exposure to idealized models (Cattarin, Thompson, Thomas, & Williams, 2000; Strahan, Wilson, Cressman, & Buote, 2006; Milkie, 1999; Tiggemann, & McGill, 2004, Tiggemann & Polivy, 2010), researchers suggest that the negative consequences of social comparison could be more contingent on the perceived relevance of the model for the means of comparison to the self, self-esteem, exposure, and degree of sociocultural norm internalization (Strahan et al., 2006). Although idealized models and celebrities present unrealistic beauty standards (often accomplished through photo shop and cosmetic surgery), this knowledge should make these models irrelevant for comparison (Strahan et al., 2006). However, despite these seemingly unrealistic idealized representations of beauty standards, many women still view these models as relevant for comparison due to the acquired belief their own appearance will be judged and compared to the idealized models by others (Strahan et al., 2006). Thus, this may lead women to become motivated to attain an idealized appearance due to the implication of the cultural norm that appearance and weight is controllable (Strahan et al., 2006).

c) Downward Social Comparison. In contrast to upward social comparisons, downward social comparisons can be made when an individual compares themselves to those that possess attributes that are considered lesser than that of the individual (Collins, 1996; Strahan et al., 2006). Although research suggests that women often engage in upward social comparisons when seeking self-improvement, women often consciously seek out and engage in downward social comparisons to gain self-esteem and body image satisfaction, especially when there is a threat to one's self-esteem (Gibbons & McCoy, 1991; Strahan et al., 2006; Wills, 1981; Wood, 1989). In

a study conducted by researchers Lew et al. (2007), women reported increases in weight and body satisfaction and decreases in anxiety about appearance and desire to lose weight after making downward social comparisons to models on non-appearance dimensions (such as academic ability). Thus, in the current study, women may report increases in self-esteem and body image satisfaction after viewing the image of the overweight model through making a downward social comparison.

4) Related Hypothesis/Objectives.

The first goal of this study is to examine the relationship between exposure to idealized depictions of women and the effect on body image concerns. It is hypothesized that exposure to, and internalization of, an idealized image will lead to decreases in body esteem in addition to leading to increases in the motivation to engage in unhealthy eating and weight loss behaviors.

II. The Idealized Relationship

A second goal of this study is to demonstrate that images of women in relationships may also be idealized. We hypothesize that exposure to images of idealized relationships will also decrease women's body esteem and increase their desire to engage in weight loss behaviors. Secondly, we also hypothesize that women that idealize relationships and express dissatisfaction with their current relationship status will be more susceptible to internalization of these images and engaging in unhealthy exercise and eating behaviors.

1) Media and the idealization of Romantic Relationships

Despite the excess of romantic comedies and messages promoting idealized romantic relationships in contemporary media, the research examining the impacts of the portrayal of these romantic ideals on women viewers, especially concerning their perceptions of romantic relationships and how they feel about themselves is limited (Holmes, 2007). Today, the idealized

romantic partner is typically portrayed as a “soul mate” and thus, these idealized relationships often encourage viewers to desire and attempt attain out an unrealistic standard of compatibility in a romantic partner (Holmes, 2007). One study found that increased exposure to media (such as romantic comedies) promoting idealized relationship norms lead to greater support for romantic ideal beliefs among participants (Hefner & Wilson, 2013). Previous research has also suggested that idealized portrayals of romantic relationships may lead people to have dysfunctional and unrealistic beliefs regarding romantic relationships (Hefner & Wilson, 2013). Further, other researchers indicate that these resulting unrealistic beliefs regarding romantic relationships may lead to decreases in relationship satisfaction (Baucom & Epstein, 1990; Bradbury & Fincham, 1987; Holmes, 2007) and other issues between romantic partners such as difficulty resolving conflicts within the relationship (Holmes, 2007; Metts & Cupach, 1990). Previous research also suggests that single people are more likely to be stigmatized than those in relationships (Budgeon, 2008; Byrne & Carr, 2005; Chaseteen, 1994; Macvarish, 2006) and have societal pressure to be in relationships (Sharp & Ganong, 2011), suggesting that being in a relationship could be idealized. To our knowledge there are no studies that connect idealized relationship status with feelings about the self and engaging in diet and exercise to obtain the relationship. Thus, in support of previous research, we suggest that exposure to romantic relationships portrayed in media may have an impact on the relationship status satisfaction, idealization of relationships, and engagement in unhealthy weight loss behaviors among women viewers.

3) *Related Hypothesis/Objectives.* Research suggests increased exposure to idealized representations of females through media is correlated to disordered weight loss behaviors among women (Derenne, & Beresin, 2006; Fernandez, & Pritchard, 2012; Gabe et al., 2008; Green & Pritchard, 2003 Thompson & Van den Berg, 2002; Yamamiya et al., 2004). However, it

is still uncertain to what extent the desire for idealized male attention (likely achieved through a romantic relationship) is a motivating contributing factor and reason behind concerns about body image and weight. A second goal of this study is to therefore examine the relationship between idealized images of women in relationships and body image concerns. It is hypothesized that exposure to an idealized image of a woman in a relationship will lead to decreases in body image satisfaction and lead to increases in the motivation to engage in unhealthy eating and weight loss behaviors. Additionally, we hypothesize that women who report a greater internalization of media and a greater desire to attain the idealized relationship status will be more likely to have decreased body image satisfaction and be more motivated to engage in unhealthy eating and weight loss behaviors after exposure to images portraying an idealized relationship.

III. Protective and Risk Factors to Body Image Disturbance

While we predict that idealized body image and relationship status are related to body image disturbances, we also predict several protective factors that will decrease these relationships. We suggest that women who possess protective factors, could be less susceptible to decreases in body image satisfaction and motivation to engage in unhealthy eating and weight loss behaviors after being exposed to an images of idealized body image and relationship status. The protective factors include self-esteem, perfectionism, and maladaptive thoughts.

1) *Self Esteem*. Exposure to thin idealized representations of females is suggested to result in decreases self-esteem (Green, Palladino & Pritchard, 2003; Kong et al., 2013; Mischner, Schie, & Engels, 2013; Shisslak & Crago, 2001). Thus, women with high self-esteem might be less likely to express body image concerns and motivations to engage in unhealthy eating and weight loss behaviors after being exposed to idealized images.

2) *Perfectionism*. Hewitt, Flett, and Ediger (1995) suggest perfectionism to be a

personality trait frequently correlated with eating disorders such as anorexia nervosa and bulimia. Although difficult to define, perfectionism is a maladaptive tendency that refers to the belief that one's sense of self-worth and achievement is contingent on one's ability to achieve unrealistic high standards in many aspects of life (Bardone-Cone, Wonderlich, Frost, Bulik, Mitchell, Uppala & Simonich, 2007). Individuals most susceptible to engaging in eating disorder behavior often have unrealistic standards for physical attractiveness and a thin body image, which are combined with unrealistic expectations and goals for themselves (Bastiani, Rao, Weltzin, & Kaye, 1995; Bardone-Cone et al., 2007; Butterfield & Leclair, 1988; Garner, Olmstead, & Polivy, 1983; Goldner, Cockell & Srikaneswaran, 2002). Thus, women with lower levels of perfectionism might be less likely to express body image concerns and motivations to change their appearance after viewing the idealized images.

3) *Maladaptive Thoughts*. Research indicates that individuals with anorexia and bulimia are more likely to have maladaptive thoughts in comparison to women with healthy eating behaviors (Boone, Braet, Vandereycken, & Claes, 2013; Dingemans, Spinhoven & Van Furth, 2006; Jones, Harris & Leung, 2005; Leung, Waller & Thomas, 1999). Maladaptive thinking is a cognitive term discovered by psychologist Albert Ellis to explain the cause of emotional issues among individuals (Madracchia, Morgan, Garos, & Garland, 2007). Ellis identified a specific type of maladaptive thinking, *musterbation* to refer to an aspect of irrational thinking that can contribute to emotional instability and perhaps, even unhealthy eating behaviors (Madracchia et al., 2007). *Musterbation* is a maladaptive thought process that refers to "absolute thinking" which consists of "if then," "shoulds," "musts," and "oughts." Absolute thinking has been suggested to dictate an individual's perceptions of the world (Ellis, 1973; Madracchia et al., 2007). For example, an individual with *musterbation* may be more likely to believe a statement

such as “if one were to lose 20lbs, then one would become more attractive.” In reference to this study, when musturbation is paired with idealized images of women, this may lead one to believe that through engaging in unhealthy eating behaviors, they will attain certain characteristics (such as success, status or attractiveness). In the current study, it is hypothesized that maladaptive thoughts and exposure to idealized representations will correlate with unhealthy eating behaviors and the motivation to change appearance.

IV. Overview of Study and Hypotheses

To further examine the influence of media on unhealthy weight loss and eating behaviors, the current study will expose participants to idealized images similar to those frequently displayed in contemporary media. To understand the impact that ideal media representations of body image and success have on females, the images will feature an attractive female model with a positive affect. Both the body type and relationship status of the woman will be varied, exposing participants to one of four conditions. In the first two conditions, the woman will have an ideal thin body image and will either be alone or with an attractive male partner. In the next two conditions, the woman will have a less ideal overweight image and will either be alone or with an attractive male partner. Participants will then respond to questions about their internalization of the ideal body image, perceptions of their body image, and desires to engage in unhealthy eating and weight loss behaviors. Protective factors (i.e., self-esteem, self-worth, maladaptive thoughts, perfectionism) will also be measured to examine if they lessen any negative effects of exposure to idealized images.

H1: Comparison of thin vs. overweight model on body esteem, weight loss behaviors, and desire to attain the image: We hypothesize that exposure to the thin model, but not the overweight model, will lead to decreases in body esteem, and increase women’s desires to engage in

unhealthy weight loss behaviors and increase their desire to attain the image of the thin model. Additionally, when the participants have internalized media images of idealized female body types and report concerns about their weight, we predict that they will report a greater desire to look like the model, engage in unhealthy behaviors, and feel worse about their bodies after being exposed to a thin vs. overweight model.

H2: Comparison of model in a relationship vs. single model on body esteem, exercise behaviors, and desire to attain the idealized image: Participants exposed to the idealized relationship status condition featuring the thin model in relationship with the idealized male partner will result in a greater increase in body image dissatisfaction and desires to engage in unhealthy weight loss behaviors in comparison to the conditions without the male present. Additionally, when the participants have internalized media images of idealized relationships and report less satisfaction with their current relationship status, we predict that they will report a greater desire to look like the model, engage in unhealthy behaviors, and feel worse about their bodies after being exposed to the model in a relationship vs. the single model.

Results from this study will contribute to existing research regarding the negative impacts that thin body image representations featured in media can have on young women, especially those that desire a romantic relationship. This study will attempt to increase the awareness of the negative impacts that sociocultural pressures of the idealized appearance can have on the psychological and physical health of women.

Methods

Participants

Participants ($N=149$) were recruited from psychology classes and received credit toward either their general research requirement for participation or extra credit toward their course

grade. A majority of the participants were female (68.5%). For the purposes of this study, we analyzed data from female participants only ($N = 102$).

Measures

Idealized images of women. To examine whether paired representations of body image and an idealized goal (such as an ideal relationship) will lead to body image dissatisfaction, maladaptive thinking, and the drive to change appearance through weight loss, the current study embedded one of four different images at the beginning of the questionnaire packet for each of the four corresponding conditions. Participants in the first condition viewed an image featuring a female with a thin body image and positive affect. Participants in the second condition viewed the same image of the woman with a thin body image, however in this condition, an attractive male partner was also featured alongside the female model. Participants in the next two conditions viewed an image of a female model with an overweight body image either with or without the male partner. Each image is shown in Appendix A.

These images were carefully selected from the media, and are representative of idealized and un-idealized representations of women advertised in the media today. To confirm that participants perceived the thin model to represent an idealized media image, two manipulation check items were included in the study. Participants reported that the thin model ($M = 7.78$, $SD = 1.51$) looked more “like the women I commonly see on TV and in magazines” than the overweight model ($M = 4.12$, $SD = 1.78$), $t(97) = 3.66$, $p < .001$. The thin model ($M = 6.14$, $SD = 2.20$) was also perceived to have “the ideal body weight and shape” in comparison to the overweight model ($M = 4.49$, $SD = 1.42$), $t(97) = 4.42$, $p < .001$.

Response to Image. After viewing one of the four images, participants responded to items relating their feelings about the image and the likelihood that the image would motivate

them to engage in weight loss behaviors. Participants responded to 23 items about the image on a 1 (*strongly disagree*) to 9 (*strongly agree*) Likert Scale. These items were created for this study (e.g. *the woman in this picture looks like the women I commonly see on TV and in magazines*). Participants also responded to two items where they were asked to select an activity from several choices (e.g. *after viewing this image, I would rather eat...A Hamburger and fries (2,000 calories)*). Higher scores on this measure indicated a greater likelihood of engaging in unhealthy eating or weight loss behaviors. Specifically, this scale resulted in the following dependent variables: a greater desire to attain the image, the perception that the woman pictured was successful, motivation to diet and exercise, feeling good about the self, a desire to engage in unhealthy eating behaviors, and a desire to engage in unhealthy exercise behaviors.

Body esteem (Franzoi & Shields, 1984). Participants responded to a Body Esteem Scale with 35 items regarding their positive and negative feelings toward their specific body parts and body functions (example body items) using a 1 (*have strong negative feelings*) to 9 (*have strong positive feelings*) Likert Scale. Higher scores on this measure indicated higher body esteem and greater positive feelings toward body parts and functions.

Body image silhouette scale (Stunkard, Sorensen, & Schlusinger, 1983). To assess participants' perception of their own body image, participants responded to a Body Image Silhouette Scale. In this measure, participants were instructed to select a body image from the range of models provided of various weights on a 1 (*very thin*) to 9 (*obese*) scale that they felt most closely resembled their own body image. Higher scores on this item indicates that participants perceive themselves to have a more overweight appearance, however, this measure does not indicate if they are satisfied with that body image- only how they see themselves.

Self-worth (Crocker, Luhtanen, Cooper, & Bouvrette, 2003). To assess participants' positive or negative feelings regarding their self-perceived value, participants responded to a self-worth measure with 18 items on a 1 (*strongly disagree*) to 9 (*strongly agree*) Likert Scale (e.g., *When I think I look attractive, I feel good about myself*). Higher scores on this measure indicate a greater sense of self-worth.

Perfectionism (Hewitt & Flett, 1990). To assess participants' desire to attain high standards, participants responded to 47 items on a perfectionism measure using a 1 (*strongly disagree*) to 9 (*strongly agree*) Likert Scale (e.g., *When I am working on something, I cannot relax until it is perfect*). Higher scores on this measure indicate greater perfectionism.

Eating disorder diagnostic scale (Stice & Telc, 2000). To assess participants' current eating and weight loss behaviors and abnormalities, participants responded to 22 items about thoughts and behaviors concerning eating and weight loss behaviors by using 1 (*not at all*) to 9 (*extremely*) Likert Scales, Yes/No response options, or by providing brief responses (e.g., *Have you felt fat?*; *How many times per week on average over the past 3 months have you made yourself vomit to prevent weight gain or counteract the effect of eating?*). Higher scores on this scale indicate a greater risk for already having or developing an eating disorder.

Self-esteem (Rosenberg, 1965). To assess participants' self-esteem, participants responded to 10 items regarding their positive and negative attitudes toward themselves on a 1 (*strongly disagree*) to 9 (*strongly agree*) Likert Scale (e.g., *On the whole, I am satisfied with myself*). Higher scores on this measure indicate higher self-esteem.

Internalization of sociocultural attitudes towards appearance (Heinberg & Thompson, 1995; Thompson et al., 1999). To assess participants' sociocultural attitudes towards their appearance, participants responded to 28 items about their thoughts and feelings regarding

their own appearance based upon the internalization of sociocultural norms on a 1 (*strongly disagree*) to 9 (*strongly agree*) Likert Scale (e.g., *TV programs are an important source of information about fashion and “being attractive”*). Higher scores on this measure indicated greater internalization of sociocultural attitudes toward appearance.

Maladaptive thoughts. To assess participants’ maladaptive thoughts, items were created for this study that asked participants to respond to items regarding their thought patterns. Participants responded to 16 items about their maladaptive thought patterns on a 1 (*strongly disagree*) to 9 (*strongly agree*) Likert Scale (e.g., *I will feel happiest only when I achieve my goals.*). Higher scores on this measure indicated greater maladaptive thought patterns.

Relationship status. Participants responded to eight items about their current relationship status, satisfaction, and expectations on a 1 (*strongly disagree*) to 9 (*strongly agree*) Likert Scale. The items have been created for this study (e.g., *I am satisfied with my relationship status*). Higher scores on this measure indicated greater idealized relationship expectation and satisfaction.

Procedure

This study was divided into two parts. Participants were told that each of the two parts was a separate research study and completed the parts at different times so that their responses to the first set of items would be less likely to influence their responses on the second set of items. This procedure also allowed us to establish baseline measures of variables (e.g., body image) to examine if exposure to an idealized image changed how participants felt about themselves and their body image. Participants completed the second part of the study at least one week after completing the first part. All procedures were approved by the Carroll College IRB.

In the first part of this study, participants completed an online pretest questionnaire through Moodle. As a cover story, participants were told that they were participating in a study examining self-perceived attractiveness and personality traits. In the online pretest questionnaire (part 1), participants completed a variety of measures to establish baseline measures for preexisting tendencies and personality traits. Participants completed the following measures in part 1: Body Esteem Scale (Franzoi & Shields, 1984), Body Image Silhouette Scale (Stunkard, Sorenson, & Schlusinger, 1983), Contingencies of Self Worth Scale (Crocker, Luhtanen, Cooper & Bouvrette, 2003), Perfectionism Scale (Hewitt & Flett, 1990), Eating Disorder Diagnostic Scale (Stice & Telc, 2000), Self Esteem Scale (Rosenberg, 1965), Sociocultural Attitudes Towards Appearance Scale (Heinberg & Thompson, 1995; Thompson et al., 1999), Maladaptive Thought Questionnaire (created for this study), and Relationship Status Questionnaire (created for this study). Participants spent approximately one hour and thirty minutes completing the first part of this study.

In the second part of this study, participants were randomly assigned to one of four different conditions. As a cover story, participants were told that they were participating in a study examining the influence of advertisements on personality traits. To test the hypothesis that exposure to an idealized image of a female in a relationship would influence decreases in body image satisfaction and increases in weight loss behaviors, participants completed a questionnaire packet with a randomly assigned image (idealized or un-idealized body image, with or without a male partner). After viewing the image, participants responded to the following measures: Body Esteem Scale (Franzoi & Shields, 1984), Body Image Silhouette Scale (Stunkard et al., 1983), Contingencies of Self Worth Scale (Crocker et al., 2003), Eating Disorder Diagnostic Scale (Stice & Telc, 2000), Self Esteem Scale (Rosenberg, 1965), Response to image Assessment

Questionnaire (created for this study), and Relationship Status Questionnaire (created for this study). Participants took about forty minutes to complete the second part of the study. After completing this study, participants were thanked for their participation and debriefed.

Results

Data Analysis Procedures

Data were analyzed using hierarchical multiple regression procedures. Several regressions were conducted, however they all followed the same four-step process. Steps 1 and 2 of the regressions tested the main effects of entered variables on the dependent measures. Step 3 tested all possible two-way interactions between the variables in Steps 1 and 2. Step 4 tested the three-way interaction between the three variables in Steps 1 and 2.

Testing the main effects. At Step 1, a standardized variable was entered; this variable was different for each regression analysis and will therefore be called “variable x” in this section. At Step 2, we entered dummy coded variables representing the model’s weight and the model’s relationship status. For the model’s weight, a “0” represented the condition where the model was thin and a “1” represented the condition where the model was overweight. For the model’s relationship status, a “0” represented the conditions where the model was pictured without a male and a “1” represented the conditions where the model was pictured with a male.

Testing the two- and three-way interactions. At Step 3, the terms representing two-way interactions were entered into the regression analysis. The three possible two-way interactions included: Variable X and the Model’s Weight; Variable X and the Model’s Relationship Status; and the Model’s Weight and Relationship Status. Significant two-way interactions were followed with simple slopes analyses. At Step 4, the terms representing the three-way interaction was entered into the regression analysis: Variable X x Model’s Weight x Model’s Relationship

Status. Because the three-way interactions were not direct tests of the hypotheses, significant results are reported but not followed with simple slopes analyses.

Dependent variables. The regression procedures were followed to calculate the main effects and interactions of the three variables on each of the following dependent measures: desire to attain the pictured image, perceptions of the model's success, motivation to diet and exercise after viewing the image, feeling good after viewing the image, desire to engage in unhealthy eating after viewing the image, and a desire to exercise after viewing the image. Additionally, we wanted to examine if exposure to the idealized images influenced changes in: body image, self-esteem, perfectionism, body esteem, self-worth, and maladaptive thoughts; the change variable was calculated by subtracting Time 2 variables from Time 1 (i.e., Time 1 – Time 2) so that positive values represent a decrease in the variable after being exposed to the media image.

Only the significant results are reported below.

Testing the Hypotheses Concerning Internalization of Media Images and Idealized Body Images

Desire to attain image. In Step 1, women who internalized media images reported a greater desire to attain the image they saw pictured ($\beta = 0.26, p = .037$). In Step 2, those who saw the thin model reported a greater desire to attain the image they saw pictured compared to those who saw the overweight model ($\beta = -0.61, p < .001$). In Step 3, the interaction between internalization and the model's weight was significant ($\beta = -0.46, p = .001$). When the model was thin, participants who internalized media images reported a greater desire to attain the image ($B = 1.14, p < .001$); however when the model was overweight, internalization did not affect participants' desire to attain the image ($B = -0.15, p = .517$).

Perceptions of success. In Step 2, women rated the overweight model as more successful than the thin model ($\beta = 0.55, p < .001$). They also rated the model who was pictured without a male as more successful than the model with a male ($\beta = 0.24, p = .029$).

Motivated to diet and exercise. In Step 1, women who internalized media images reported a greater motivation to diet and exercise after viewing the image of the model ($\beta = 0.29, p = .020$). In Step 2, those who saw the model pictured without the male reported a greater desire to diet and exercise ($\beta = 0.25, p = .038$).

Feel good about the self. In Step 2, women who viewed the overweight model reported feeling better about themselves compared to those who viewed the thin model ($\beta = 0.29, p = .020$). Additionally, women reported feeling better about themselves after seeing the model without the male than the model with the male ($\beta = 0.29, p = .020$).

Desire to engage in unhealthy eating behaviors. There are no significant results to report for this variable.

Desire to engage in unhealthy exercise behaviors. In Step 3, the interaction between the model's weight and internalization of media images was marginally significant ($\beta = 0.38, p = .053$). When the model was thin, participants who internalized media images reported a greater desire to exercise ($B = 0.43, p = .005$); however when the model was overweight, internalization did not affect participants' desire to attain the image ($B = -0.18, p = .281$).

Body image scale. In Step 2, women reported a decrease in their body size after being exposed to the overweight model compared to the thin model ($\beta = 0.38, p = .053$).

Self-esteem. In Step 3, the interaction between the model's weight and internalization of media images was marginally significant ($\beta = 0.40, p = .058$). When the model was thin, participants who internalized media images reported a decrease in self-esteem ($B = 0.14, p =$

.288, not significant) and when the model was overweight, participants who internalized media images reported an increase in self-esteem ($B = -0.15, p = .196$, not significant).

Perfectionism. There are no significant results to report for this variable.

Body esteem. In Step 3, the interaction between the model's weight and internalization of media images was marginally significant ($\beta = -0.45, p = .026$). When the model was thin, participants who internalized media images reported a decrease in body esteem ($B = 0.25, p = .059$, marginally significant); however when the model was overweight, internalization did not affect participants' body esteem ($B = -0.05, p = .547$).

Self-worth. In Step 3, the interaction between the model's weight and the model's relationship status was marginally significant ($\beta = 0.46, p = .048$); this interaction was not followed with simple slopes analyses, as it is not a direct test of the study's hypotheses.

Maladaptive thoughts. There are no significant results to report for this variable.

Overall summary. Examining main effects, those who internalized media images reported a greater desire to diet and exercise, regardless of the model pictured. Additionally, the overweight model was perceived to be more successful than the thin model and participants reported feeling better about themselves after being exposed to the overweight model. Consistent with the first hypothesis, when the model was thin, participants who internalized media images reported a greater desire to attain the image, a greater desire to exercise for a longer period of time, a decrease in self-esteem, and a decrease in body esteem.

Testing the Hypotheses Concerning Concerns about Weight and Idealized Body Images

Desire to attain image. In Step 1, women who had concerns about their weight reported a greater desire to attain the image they saw pictured ($\beta = 0.41, p = .001$). In Step 2, those who saw the thin model reported a greater desire to attain the image they saw pictured compared to

those who saw the overweight model ($\beta = -0.55, p < .001$). In Step 3, the interaction between concerns about weight and the model's weight was significant ($\beta = -0.35, p = .010$). When the model was thin, participants who reported greater concern about their weight reported a greater desire to attain the image ($B = 1.25, p = .001$); however when the model was overweight, concerns about weight did not affect desire to attain the image ($B = 0.13, p = .606$). In Step 4, the interaction between concerns about weight, the model's weight, and the model's relationship status was significant ($\beta = -0.46, p = .052$).

Perceptions of success. In Step 2, women rated the overweight model as more successful than the thin model ($\beta = 0.56, p < .001$). They also rated the model who was pictured without a male as more successful than the model with a male ($\beta = 0.24, p = .032$).

Motivated to diet and exercise. In Step 1, women who had concerns about their weight reported a greater motivation to diet and exercise after viewing the image of the model ($\beta = 0.55, p < .001$). In Step 2, those who saw the model pictured without the male reported a greater desire to diet and exercise ($\beta = 0.24, p = .023$).

Feel good about the self. In Step 2, women who viewed the overweight model reported feeling better about themselves compared to those who viewed the thin model ($\beta = 0.38, p = .003$). Additionally, women reported feeling better about themselves after seeing the model without the male than the model with the male ($\beta = 0.22, p = .066$, marginally significant).

Desire to engage in unhealthy eating behaviors. In Step 1, those who reported concerns about their weight were more likely to report that they would engage in unhealthy eating behaviors ($\beta = 0.36, p = .004$).

Desire to engage in unhealthy exercise behaviors. In Step 1, those who reported concerns about their weight were less likely to report that they would engage in unhealthy

exercise behaviors ($\beta = -0.33, p = .008$). In Step 3, the interaction between the model's weight and concerns about weight was marginally significant ($\beta = 0.32, p = .081$). When the model was thin, participants who reported greater concern about their weight reported a greater desire to exercise ($B = 0.56, p = .002$); however when the model was overweight, concerns about weight did not affect desire to exercise ($B = 0.10, p = .602$).

Body image scale. In Step 3, the interaction between the model's weight and the model's relationship status was marginally significant ($\beta = 0.41, p = .062$); this interaction was not followed with simple slopes analyses, as it is not a direct test of the study's hypotheses. The interaction between concerns about weight and the model's relationship status was also significant ($\beta = 0.75, p = .001$). When the model was pictured with a male, participants who reported greater concern about their weight reported an increase in body size ($B = -0.23, p = .059$, marginally significant); however when the model was not with a male, concerns about weight did not affect body size ($B = 0.07, p = .491$).

Self-esteem. There are no significant results to report for this variable.

Perfectionism. There are no significant results to report for this variable.

Body esteem. In Step 3, the interaction between the model's weight and concerns about weight was significant ($\beta = -0.58, p = .002$). When the model was thin, participants who reported greater concern about their weight reported a decrease in body esteem ($B = 0.22, p = .108$, not significant) and when the model was overweight, those who reported greater concerns about weight reported an increase in body esteem ($B = -0.08, p = .434$).

Self-worth. In Step 3, the interaction between the model's weight and the model's relationship status was significant ($\beta = 0.52, p = .025$); this interaction was not followed with simple slopes analyses, as it is not a direct test of the study's hypotheses.

Maladaptive thoughts. There are no significant results to report for this variable.

Overall summary. Examining main effects, those who had concerns about their weight reported a greater desire to diet and exercise and reported greater motivation to engage in unhealthy eating, regardless of the model pictured. Additionally, the overweight model was perceived to be more successful than the thin model and participants reported feeling better about themselves after being exposed to the overweight model. Consistent with the first hypothesis, when the model was thin, participants who had concerns about their weight reported a greater desire to attain the image, a greater desire to exercise for a longer period of time, and a decrease in body esteem.

Testing the Hypotheses Concerning Current Relationship Satisfaction and Idealized Romantic Images

Desire to attain image. In Step 2, those who saw the thin model reported a greater desire to attain the image they saw pictured compared to those who saw the overweight model ($\beta = -0.59, p < .001$).

Perceptions of success. In Step 1, those who reported greater satisfaction in their relationship status perceived the model to be successful ($\beta = 0.23, p = .067$, marginally significant). In Step 2, women rated the overweight model as more successful than the thin model ($\beta = 0.53, p < .001$). They also rated the model who was pictured without a male as more successful than the model with a male ($\beta = 0.22, p = .058$, marginally significant).

Motivated to diet and exercise. There are no significant results to report for this variable.

Feel good about the self. In Step 2, women who viewed the overweight model reported feeling better about themselves compared to those who viewed the thin model ($\beta = 0.39, p = .002$).

Desire to engage in unhealthy eating behaviors. In Step 4, there was a significant three-way interaction between participants' satisfaction with their current relationship, the model's weight, and the model's relationship status ($\beta = -0.62, p = .039$).

Desire to engage in unhealthy exercise behaviors. There are no significant results to report for this variable.

Body image scale. There are no significant results to report for this variable.

Self-esteem. There are no significant results to report for this variable.

Perfectionism. There are no significant results to report for this variable.

Body esteem. In Step 4, the interaction between the model's weight, the model's relationship status and participants' satisfaction with their current relationship status was marginally significant ($\beta = -0.61, p = .055$).

Self-worth. In Step 3, the interaction between the model's weight and the model's relationship status was marginally significant ($\beta = 0.60, p = .012$); this interaction was not followed with simple slopes analyses, as it is not a direct test of the study's hypotheses. Additionally, the interaction between the participants' current relationship satisfaction and the model's weight was significant ($\beta = -0.48, p = .027$). When the model was thin, participants who reported greater satisfaction in their relationships reported a decrease in their self-worth ($B = 0.11, p = .337$, not significant) and when the model was overweight, participants who reported greater satisfaction in their relationships reported an increase in their self-worth ($B = -0.04, p = .686$, not significant)

Maladaptive thoughts. There are no significant results to report for this variable.

Overall summary. Examining main effects, the model who was pictured without the male was rated to be more successful than the model pictured in a relationship. Participants' satisfaction with their current relationship did not interact with the model's relationship status for any of the dependent variables; therefore, we did not find support for our second hypothesis.

Testing the Hypotheses Concerning the Idealization of Romantic Images and Viewing Idealized Romantic Images

Desire to attain image. In Step 2, those who saw the thin model reported a greater desire to attain the image they saw pictured compared to those who saw the overweight model ($\beta = -0.59, p < .001$). In Step 3, there was a significant interaction between the model's weight and the idealization of romantic images ($\beta = -0.44, p = .008$). When the model was thin, participants who reported greater idealization of romantic images reported a greater desire to attain the image ($B = 0.66, p = .026$); however when the model was overweight, idealization of romantic images did not affect desire to attain the image ($B = -0.08, p = .624$).

Perceptions of success. In Step 2, women rated the overweight model as more successful than the thin model ($\beta = 0.57, p < .001$). They also rated the model who was pictured without a male as more successful than the model with a male ($\beta = 0.26, p = .020$). In Step 3, the interaction between the model's relationship status and the idealization of romantic images ($\beta = 0.29, p = .057$). When the model was pictured in a relationship, idealization of romantic relationships did not affect perceptions of the model's success ($B = -0.19, p = .281$); however when the model was pictured alone, those who idealized romantic relationships reported that the model was more successful ($B = 0.29, p = .098$, marginally significant).

Motivated to diet and exercise. In Step 3, there was a significant interaction between the idealization of romantic images and the model's relationship status ($\beta = -0.43, p = .030$). When the model was pictured in a relationship, those who idealized romantic relationships reported less motivation to diet and exercise ($B = -0.36, p = .155$, not significant) and when the model was pictured alone, those who idealized romantic images reported greater motivation to diet and exercise ($B = 0.50, p = .143$, not significant).

Feel good about the self. In Step 2, women who viewed the overweight model reported feeling better about themselves compared to those who viewed the thin model ($\beta = 0.42, p = .001$). Additionally, women reported feeling better about themselves after seeing the model without the male than the model with the male ($\beta = 0.24, p = .048$).

Desire to engage in unhealthy eating behaviors. There are no significant results to report for this variable.

Desire to engage in unhealthy exercise behaviors. There are no significant results to report for this variable.

Body image scale. There are no significant results to report for this variable.

Self-esteem. There are no significant results to report for this variable.

Perfectionism. There are no significant results to report for this variable.

Body esteem. There are no significant results to report for this variable.

Self-worth. In Step 3, the interaction between the model's weight and the model's relationship status was marginally significant ($\beta = 0.45, p = .053$); this interaction was not followed with simple slopes analyses, as it is not a direct test of the study's hypotheses.

Maladaptive thoughts. There are no significant results to report for this variable.

Overall summary. Examining the main effects, participants who saw the single model reported feeling better about themselves than those who saw the model in a relationship. Consistent with the second hypothesis, when the model was alone, participants who idealized romantic relationships reported a greater desire to diet and exercise. However when the model was pictured alone, those who idealized romantic relationships rated the model as more successful; this finding is inconsistent with our second hypothesis.

Discussion

The purpose of our study was to examine if the exposure to idealized images of women in media would impact women's self-perceptions and increase their desire to engage in unhealthy weight loss behaviors. In this study, we explored two types of idealized image conditions: idealized body weight and idealized relationship status. We predicted that exposure to, and internalization of, an idealized image will decrease body image satisfaction and increase motivation to diet and exercise. Our results demonstrate that internalization of idealized images and weight concerns affected negative feelings about the self and exercise behaviors among women. Specifically, after viewing a thin model, women who have internalized the thin ideal and those who have concerns about their weight reported greater desire to look like the model, exercise for longer and felt worse about their bodies. These results add further support to previous research that demonstrates that media images impact how women feel about their bodies and can motivate women to engage in unhealthy behaviors to obtain idealized images (Derenne, & Beresin, 2006; Grabe, Ward, & Shibley Hyde, 2008; Van den Berg, et al., 2002; Yamamiya et al., 2005), especially for women who internalize the images (Fernandez & Pritchard, 2012; Fisher, Dunn & Thompson, 2002; Thompson et al., 1999; Thompson & Stice, 2001).

The second type of idealized image concerned relationship status. We predicted that women who are seeking romantic relationships may be more likely to idealize relationships and express body image concerns after being exposed to images of women in relationships. However, we found that images of women in relationships did not impact women's desire to engage in unhealthy weight loss behaviors or negative self-perception. This finding could reflect changing values concerning marriage and relationship status. For instance, according to the US Census Bureau (2016) the median age of single and unmarried people has increased. In addition, women are getting married later in life (US Census Bureau, 2016). In line with this reasoning, we found that the model who was pictured without the male was rated to be more successful than the model pictured in a relationship. These findings could suggest that women and specifically the participants in this study, could feel less concern and sociocultural pressures to attain a relationship or marriage.

Limitations and Future Directions

It is important to note some limitations and future directions of the current work. First, there were some limitations with the demographics of the participants. Since the participants in this study consisted of undergraduate women between the ages of 18-24, this limited sample demographic could account for a lower interest or concern with the desire to attain an idealized relationship status. Research concerning the relationship interests and attitudes of college students (Bisson & Levine, 2009; England, Fitzgibbons Shafer & Fogarty, 2008), suggests that undergraduates are greatly influenced by relationships characterized by intimacy but lack of commitment such as "friends with benefits" and "hook-up" types of relationships which appear to have become mainstream on college campuses. Therefore, college students today may seek

out and prefer short term or casual relationships instead of long term or serious relationships (Bisson & Levine, 2009; England et al., 2008). Future research should also account for the sexual orientation of participants. Since this study selected to use a heterosexual relationship status to represent the “idealized relationship status,” not including a measure for sexual orientation and a more detailed measure for relationship preference could have caused limitations in the current results concerning the desire to attain the idealized relationship.

Despite previous research which suggests single people are more stigmatized (Budgeon, 2008; Byrne & Carr, 2005; Chaseteen, 1994; Macvarish, 2006; Sharp & Ganong, 2011), our findings suggest that exposure to images of an idealized relationship do not have a significant impact on women’s feelings about the self and engagement in unhealthy weight loss behaviors. In addition to reflecting changing values concerning marriage and relationship status (US Census Bureau, 2016), this finding could also indicate that the images used for the idealization of the romantic relationship did not accurately convey the level of romantic interest that we had intended. To test the impact of relationship status on women’s self-perception and motivations to lose weight, future research should focus on the interaction between the idealized man and woman. We suggest that participants should be exposed to a video clip, or be presented with images that correspond with a story about a relationship. Through making the romantic interest between idealized man and woman more overt and reflective of the idealized relationships in romantic comedies and in media today, we suggest this may have a more significant impact on women’s desire to attain the idealized relationship, and therefore make her more susceptible to engaging in negative self-perception and unhealthy weight loss behaviors.

To further examine reasons for why women may feel more sociocultural pressures to engage in weight loss behaviors in hopes to attain an idealized status, it is critical to discuss the

theory of objectification and the emphasis placed on a women's appearance in society. In relation to the idealized images of women seen in media today, often, these idealized images of women focus on appearance and therefore, objectify the women depicted in the images. According to Calogero, Davis, and Thompson (2005), sexual objectification occurs when an individual is viewed and treated as a bodily object. The objectification theory refers to the process where through viewing other female bodies as objects, females begin to self-objectify and thus see themselves as objects (Calogero et al., 2005). Through self-objectification, females often develop the belief that self-worth and value is contingent solely upon the state of their appearance. Thus, research suggests that weight loss behaviors and eating disorders are often caused by one's attempt to self-monitor their appearance to maintain self-worth and value (Calogero et al., 2005). This research indicates that the theory of objectification provides reasoning for why certain females become motivated to engage in weight loss or appearance altering behaviors after being exposed to media images of the idealized body image. Since the current research suggests that internalization and concerns about weight impacted women's self-perception and exercise behaviors, future research should also look at the relationship between internalization, weight concerns, and self-objectification to further examine the impact on women's motivations to lose weight and decreases in body image satisfaction.

Implications. Despite limitations, the results of this current study help to provide greater understanding and support for current research concerning the impact of exposure to and the internalization of idealized images on women's body esteem and the desire to exercise, especially those with weight concerns. Results from this study suggest that internalization of the thin ideal and concerns about weight are the two mediating factors that may have the greatest impact on women's motivations to exercise and body esteem. Thus, women that regularly view

and internalize idealized images of women and have concerns about their weight may be at an increased risk for body image dissatisfaction and engaging in unhealthy weight loss behaviors.

The intention of this study is to increase the awareness of the negative implications that sociocultural pressures of the idealized appearance can have on the psychological and physical health of women.

References

- Bastiani, A. M., Rao, R., Weltzin, T., & Kaye, W. H. (1995). Perfectionism in anorexia nervosa. *International Journal of Eating Disorders, 17*(2), 147-152.
- Bardone-Cone, A. M., Wonderlich, S. A., Frost, R. O., Bulik, C. M., Mitchell, J. E., Uppala, S., & Simonich, H. (2007). Perfectionism and eating disorders: Current status and future directions. *Clinical Psychology Review, 27*(3), 384-405.
- Baucom, D. H., & Epstein, N. (1990). Brunner/Mazel cognitive therapy series. *Cognitive-behavioral marital therapy. Philadelphia: Brunner/Mazel.*
- Bradbury, T. & Fincham, F. (1987). Affect and cognition in close relationships: Toward an integrative model. *Cognition and Emotion, 1*, 59-76.
- Bissell, K. & Rask, A. (2010). Self-discrepancy, internalization of the thin ideal, and perceptions of attractiveness and thinness in Dove's Campaign for Real Beauty. *International Journal of Advertising: The Review of Marketing Communications, 29*, 643-668.
- Boone, L., Braet, C., Vandereycken, W., & Claes, L. (2013). Are maladaptive schema domains and perfectionism related to body image concerns in eating disorder patients?. *European Eating Disorders Review, 21*(1), 45-51.
- Brynne, A. & Carr, D. (2005). Caught in the cultural lag: The stigma of singlehood. *Psychological Inquiry, 16*, 84-141.
- Budgeon, S. (2008). Couple culture and the production of singleness. *Sexualities, 11*, 301-325.
- Butterfield, P. S., & Leclair, S. (1988). Cognitive characteristics of bulimic and drug-abusing women. *Addictive Behaviors, 13*(2), 131-138.
- Calogero, R. M., Davis, W. N., & Thompson, J. K. (2005). The role of self-objectification in the experience of women with eating disorders. *Sex roles, 52*(1), 43-50.

- Cattarin, J. A., Thompson, J. K., Thomas, C., & Williams, R. (2000). Body image, mood, and televised images of attractiveness: The role of social comparison. *Journal of Social and Clinical Psychology, 19*(2), 220-239.
- Chasteen, A.L. (1994). "The world around me": The environment and single women. *Sex Roles, 31*, 309-328.
- Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological bulletin, 119*(1), 51.
- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology, 85*, 894-908.
- Current Population Survey, Annual Social and Economic Supplement, 1967-2016. (2016). Retrieved from <http://www.census.gov/hhes/families/files/graphics/AD3b.pdf>
- Derenne, J. & Beresin, E. (2006). Body image, media, and eating disorders. *ProQuest Psychology Journals, 30*, 257-260.
- Dingemans, A. E., Spinhoven, P., & Van Furth, E. F. (2006). Maladaptive core beliefs and eating disorder symptoms. *Eating Behaviors, 7*(3), 258-265.
- England, P., Shafer, E. F., & Fogarty, A. C. (2008). Hooking up and forming romantic relationships on today's college campuses. *The gendered society reader, 3*, 531-593.
- Fernandez, S., & Pritchard, M. (2012). Relationships between self-esteem, media influence and drive for thinness. *Eating behaviors, 13*(4), 321-325.
- Fisher, E., Dunn, M., & Thompson, J. K. (2002). Social comparison and body image: An investigation of body comparison processes using multidimensional scaling. *Journal of Social and Clinical Psychology, 21*, 566-579.

Franzoi, S., & Shields, S. (1984). The body-esteem scale: Multidimensional structure and sex differences in a college population. *Journal of Personality Assessment*, 48, 173-178.

Garner, D. M., Garfinkel, P. E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women. *Psychological reports*, 47(2), 483-491.

Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2(2), 15-34.

Gibbons, F. X., & McCoy, S. B. (1991). Self-esteem, similarity, and reactions to active versus passive downward comparison. *Journal of Personality and Social Psychology*, 60(3), 414.

Goldner, E. M., Cockell, S. J., & Srikameswaran, S. (2002). Perfectionism and eating disorders. *American Psychological Association*, 319-340.

Grabe, S., Ward, M. & Hyde, J.S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134, 460-476.

Green, S. P., & Pritchard, M. E. (2003). Predictors of body image dissatisfaction in adult men and women. *Social Behavior and Personality: An International Journal*, 31(3), 215-222.

Harrison, K., & Cantor, J. (1997). The relationship between media consumption and eating disorders. *Journal of Communication*, 47(1), 40-67.

- Thompson, J. K., & Heinberg, L. J. (1999). The media's influence on body image disturbance and eating disorders: We've reviled them, now can we rehabilitate them?. *Journal of social issues, 55*(2), 339-353.
- Hewitt P., & Flett, G. (2002). Perfectionism theory, research, and treatment. *European Eating Disorders Review, 12*.
- Hewitt, P. L., Flett, G. L., & Ediger, E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. *International Journal of Eating Disorders, 18*(4), 317-326.
- Holmes, B. M. (2007). In search of my "one-and-only": Romance-related media and beliefs in romantic relationship destiny. *The Electronic Journal of Communication, 17*(3/4), 1-29.
- Jones, C., Harris, G., & Leung, N. (2005). Core beliefs and eating disorder recovery. *European Eating Disorders Review, 13*(4), 237-244.
- Kilbourne, J. (1999) *Deadly Persuasion: Why women and girls must fight the addictive power of advertising*. New York. Free Press.
- Leung, N., Waller, G., & Thomas, G. (1999). Core beliefs in anorexic and bulimic women. *The Journal of Nervous and Mental, 187*(12), 736-741.
- Lew, A. M., Mann, T., Myers, H., Taylor, S., & Bower, J. (2007). Thin-ideal media and women's body dissatisfaction: Prevention using downward social comparisons on non-appearance dimensions. *Sex Roles, 57*(7-8), 543-556.
- Macvarish, J. (2006). What is 'the problem' of singleness? *Sociological Research Online, 11*, 1-6.
- Mandracchia, J. T., Morgan, R. D., Garos, S., & Garland, J. T. (2007). Inmate thinking an empirical investigation. *Criminal Justice and Behavior, 34*(8), 1029-1043.

- Metts, S. & Cupach, W.R. (1990). The influence of relationship beliefs and problem-solving responses on satisfaction in romantic relationships. *Human Communication Research, 17*, 170-185.
- Milkie, M. A. (1999). Social comparisons, reflected appraisals, and mass media: The impact of pervasive beauty images on Black and White girls' self-concepts. *Social Psychology Quarterly, 62*(2), 190-210.
- Mischner, I. H., van Schie, H. T., & Engels, R. C. (2013). Breaking the circle: Challenging Western sociocultural norms for appearance influences young women's attention to appearance-related media. *Body image, 10*(3), 316-325.
- Moradi, B., Dirks, D., & Matteson, A. V. (2005). Roles of sexual objectification experiences and internalization of standards of beauty in eating disorder symptomatology: A test and extension of objectification theory. *Journal of Counseling Psychology, 52*(3), 420.
- Rosenberg, M. (1965). *Society of The Adolescent Image*. Princeton, NJ: Princeton University Press.
- Sharp, E. & Ganong, L. (2011). "I'm a loser, I'm not married, let's just all look at me": Ever-single women's perceptions of their social environment. *Journal of Family Issues, 32*, 956-980.
- Shisslak, C. M., & Crago, M. (2001). Risk and protective factors in the development of eating disorders. *Body image, Eating Disorders, and Obesity in Youth: Assessment, Prevention, and Treatment, 103-125*.
- Stice, E., Spangler, D., & Agras, W. S. (2001). Exposure to media-portrayed thin-ideal images adversely affects vulnerable girls: A longitudinal experiment. *Journal of Social and Clinical Psychology, 20*(3), 270-288.

Stice, E., Fischer, M., & Martinez, E. (2004). Eating disorder diagnostic scale: Additional evidence of reliability and validity. *Psychological Assessment, 16*, 60-71.

Stice, E., Ziemba, C., Margolis, J., & Flick, P. (1996). The dual pathway model differentiates bulimics, subclinical bulimics, and controls: Testing the continuity hypothesis. *Behavior Therapy, 27*(4), 531-549.

Strahan, E. J., Wilson, A. E., Cressman, K. E., & Buote, V. M. (2006). Comparing to perfection: How cultural norms for appearance affect social comparisons and self-image. *Body Image, 3*(3), 211-227.

Thompson, J. K., Heinberg, L.J., Altabe, M., & Tantleff-Dunn, S. (1999). Exacting beauty: Theory, assessment, and treatment of body image disturbance. *American Psychological Association*.

Thompson, J.K., & Stice, E. (2001). Thin-ideal internalization: Mounting Evidence for a new risk factor for body-image disturbance and eating pathology. *Current Directions in Psychological Science, 10*, 181-183.

Tiggemann, M., & McGill, B. (2004). The role of social comparison in the effect of magazine advertisements on women's mood and body dissatisfaction. *Journal of Social and Clinical Psychology, 23*(1), 23-44.

Tiggemann, M., & Polivy, J. (2010). Upward and downward: Social comparison processing of thin idealized media images. *Psychology of Women Quarterly, 34*(3), 356-364.

- U.S. Census Bureau, Decennial Censuses, 1890 to 1940, and Current Population Survey, Annual Social and Economic Supplements, 1947 to 2016. (2016). Retrieved from <http://www.census.gov/hhes/families/files/graphics/MS-2.pdf>
- Van Den Berg, P., Thompson, J.K., Obremski-Brandon K, & Covert, M. (2002). The tripartite influence model of body image and eating disturbance: A covariance structure modeling investigation testing the mediational role of appearance comparison. *Journal of Psychosomatic Research, 53*(5), 1007-1020.
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin, 90*(2), 245-271.
- Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin, 106*(2), 231-248.
- Yamamiya, Y., Cash, T., Melnyk, S., Posavac, H., & Posavac, S. (2005). Women's exposure to thin-and-beautiful media images: Body image effects of media-ideal internalization and impact-reduction interventions. *Body Image, 2*, 74-80.

Appendix A
Images

