MEDIA'S PORTRAYAL OF THE "IDEAL IMAGE" WITH EMPHASIS ON THE "THIN IDEAL" AND ITS EFFECTS ON WOMEN'S BODY IMAGE

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CERTIFICATION OF APPROVAL

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Signed Certification of Approval is
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DEDICATION

I dedicate this thesis to my family and thesis chair, Dr. Gary Williams for being with me every step of the way.

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ABSTRACT

Women are bombarded with reminders of what they should look like to be considered attractive. The ‘ideal body image” represented by the media which emphasizes thinness, youth, and height is difficult for the average woman to attain. Past research has shown that exposure to media images representing the “ideal body” has negative effects on women’s body image, self-esteem, mood, and can promote the development of eating disorders. The present study examined how the ideal female body image portrayed by the media impacts the way women feel about themselves in terms of body dissatisfaction, mood, self-esteem, and social comparison. Additionally, because past research has shown that the inclusion of warning label helps ameliorate the known negative effects of exposure to such images, this study explored the effects of warning labels on women’s body dissatisfaction, mood, self-esteem, and social comparison. Participants were randomly assigned to one of four conditions: digitally altered without a warning label media image condition, digitally altered with a warning label media image condition, unaltered media image condition, or neutral condition**.** Overall, it was found that there were no significant effects of media image condition on measures of body dissatisfaction, negative affect, self-esteem, and social comparison. However, women who viewed digitally altered images with a warning label had significantly lower positive affect scores than those who viewed neutral images. Additionally, findings revealed that the use of warning labels does not reduce the negative effects associated with exposure to thin idealized

media images. Although the present study did not demonstrate the profound negative effects of viewing the “ideal body image” found in most previous studies, further research is warranted given the importance of this topic.

CHAPTER I

REVIEW OF THE LITERATURE

Mass media is used to reach a large audience through various forms of communication including online advertising, film, television, newspapers, magazines, books, and billboards. These communications often present idealized images of men and women's bodies, which might adversely affect individuals who view those images. The purpose of the present study was to examine how the ideal female body image portrayed by the media impacts the way women feel about themselves in terms of body satisfaction, mood, self-esteem, and social comparison. This study also explored the effects of warning labels informing participants about the nature of the images on women's body image.

What the Media defines as the "Ideal Image"

Mass media constitutes one of the most powerful sources of pressure upon one's own perceptions of body image (Spettigue & Henderson, 2004). The National Eating Disorder Association defines body image as "how you see yourself when you look in the mirror or when you picture yourself in your mind" (National Eating Disorders Association, 2001). Through various sources of media such as television, film, magazines, online ads, and television commercials, an image is portrayed that realistically can only be attained by a few people naturally or through plastic surgery or Photoshop (digitally altering images to make them appear flawless). The media provides a context that is conducive to the development of body shape and body

image concerns (Spettigue & Henderson, 2004). For females, the current cultural ideal of beauty emphasizes thinness, youth, and height (Fouts & Burggraf, 1999, 2000; Malkin, Wornian, & Chrisler, 1999). For men, the current cultural ideal is lean and highly muscular, with a well-developed chest and arms, with wide shoulders tapering down to a narrow waist (Pope et al., 2000).

Media has even emphasized the ideal body image through toys. For boys, current action figures such as G.I Joe, Batman, and Superman all exhibit a very muscular figure compared to same dolls from many years ago (Baghurst, Hollander, Nardell, & Haff, 2006; Pope, Olivardia, Gruber, & Borowiecki, 1999). For girls, Barbie, a popular doll for females, exhibits a very slender body and an unrealistic waist-to-hip ratio, with perfect symmetrical, facial features (Baghurst, Hollander, Nardell, & Haff, 2006; Pope, Olivardia, Gruber, & Borowiecki, 1999). The doll is beautiful, extremely thin, and never has an average size or an overweight Barbie doll bee advertised. This unrealistic body shape has also been portrayed in Disney's characters that are created with very thin body types. Although recently Disney characters have been more diverse in terms of ethnicity (e.g., Princess Tiana), one thing that has not changed is the unrealistic body type.

Manipulations to Obtain the Media Ideal

Digitally altering or enhancing media images is a common practice across many fashion, media, and advertising industries (National Advisory Group on Body Image, 2009). Hairstyling, make-up, tanning, and lighting are also used to enhance the attractiveness of the thin models. Almost all media images will receive some form

of digital alteration or enhancement, some to the extreme (Bennett, 2008). Digital alteration is not only used to make women appear thinner, but also to alter other parts of the images to make them more consistent with the ideal. Techniques such as airbrushing are used to remove blemishes, imperfections and wrinkles, smooth or alter skin color and tone, change hair and eye colors, and to elongate limbs, enlarge breasts and slim waists, thighs and arms (Metzmacher, 2008).

Body Dissatisfaction. Grogan defines body dissatisfaction as "a person's negative thoughts about his or her own body" (Grogan, 2008). This typically includes judgments about size, shape, and muscle tone, and generally involves a discrepancy between one's own body type and an ideal body type (Grogan, 2008). Body dissatisfaction can also be defined as internal judgments regarding one's own body and can be expressed in discrepancies between perceived and desired body size and in feeling fat (Brennan & Kevenew, 1985; Counts & Adams, 1985; Carroll et al., 1986; Thompson & Thompson, 1986).

Prevalence of Body Dissatisfaction. Body dissatisfaction is prevalent during adolescence when body image is the most important component of adolescent girls' self-esteem (Levine & Smolak, 2002). According to Borresen and Rosenvinge (2003), from a sample of 2,449 Norwegian adolescent girls, between 37% and 54% were dissatisfied with their body shape. Compared to Norwegian adolescents, research in the Unites States suggests that based on a sample of 293 adolescent girls, around 40% were dissatisfied with their bodies (Presnell, Bearman, & Stice, 2004). Community studies have shown that about 30% of teenage girls have significant weight and shape

concerns which may indicate body dissatisfaction (Borresen & Rosenvinge, 2003). Among the collegiate population, over 90% of U.S. College women and 70% of U.S. college men reported body and/or weight dissatisfaction (Neighbors & Sobal, 2007). These numbers indicate that a high percentage of adolescent girls and college-age women report body dissatisfaction.

*Causes and Consequences of Body Dissatisfaction***.** The likely cause of body dissatisfaction amongst adolescent girls is the unrealistic standard of female beauty, which places an inordinate emphasis on thinness (Fallon, 1990; Heinberg, 1996; Rodin, Silbertein, & Striegel-Moore, 1984). Body dissatisfaction may express itself behaviorally in terms of attempts to restrain food intake and episodes of overeating (e.g., binging) (Herman & Mack, 1975; Herman & Polivy, 1984; Ogden & Wardle, 1991; Ogden, 1992). Body dissatisfaction has been linked to a number of negative consequences including the development of dieting, excessive exercise, and low self-esteem. Body weight and shape have become a great concern for females, leading them to engage in food restriction in order to reach their ideal weight. They become obsessed trying to attain the image portrayed by the media and engage in excessive exercising and dieting (Olivardia, 2002). This is a serious concern as body dissatisfaction is associated with negative self-perception, depressed mood, and disordered eating (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). This is due to the unrealistically slender body they strive to achieve (Thompson et al., 2004).

Effects of Body Dissatisfaction

Eating Disorders

It may not be surprising to hear that some women develop eating disorders because the expectations they have to live up to are impossible to achieve. Eating disorders such as bulimia nervosa, anorexia, binge eating, and orthorexia, are common in women in the U.S (National Eating Disorders Association, 2001). Eating disorders impact millions of people every year in the United States (National Eating Disorders Association, 2001). Bulimia is an eating disorder that consists of episodes of excessive food intake alternating with periods of purging and/or restricting. Approximately 80% of bulimia nervosa patients are women (National Eating Disorders Association, 2001). Individuals who have bulimia may be of normal weight, or they may be under or overweight. The individual engages in compensatory behaviors that include self-induced vomiting, use of laxatives, diuretics or enemas, fasting, excessive exercise or strict diets (National Eating Disorders Association, 2001). Binge Eating Disorder is similar to bulimia and is characterized by compulsively taking in large quantities of food at a single sitting. The prevalence of binge eating disorder is estimated to be approximately 1-5% of the general population and affects 3.5% of women (National Eating Disorders Association, 2001). Anorexia is an eating disorder characterized by weight obsession, self-starvation, and distortion of body image. Approximately 90-95% of anorexia nervosa sufferers are girls and women (National Eating Disorders Association, 2001). Orthorexia is an eating disorder in which a person engages in an extreme or excessive preoccupation with

avoiding unhealthy foods. Women who engage in dieting and dietary restraint are at risk for overeating and eating disorders such as bulimia nervosa and binge eating (Harrison & Cantor, 1997; Stice, Schupak-Neuberg, Shaw, & Stein, 1994).

Men may also suffer from eating disorders. A common eating disorder for men is muscle dysmorphia. Muscle dysmorphia is a disorder in which men become obsessed with muscularity (Olivardia, Pope, & Hudson, 2002). Muscle dysmorphia may be just as dangerous to men as is the anorexic ideal to women, and may be dangerous because some male images in the media may not be attainable without drugs such as anabolic steroids (Kouri, Pope, Katz, & Oliva, 1995; Pope, et al., 2000).

Media Influences Body Image and Satisfaction

There is convincing evidence that the unrealistic body image portrayed by the media leads to body dissatisfaction amongst girls and women (Grabe, Ward, & Hyde, 2008). Mass media is regarded as the single strongest influencing factor on body image (Irving, 1990). Sociocultural Theory and Social Comparison Theory suggest that body dissatisfaction is influenced by unrealistic societal beauty ideals transmitted through the media (Hargreaves & Tiggemann, 2004).

Social Comparison Theory. Research has suggested that women are increasingly feeling pressure from the media to conform to the standards set by their same-sex counterparts depicted in the media, meaning, women compare themselves with other women and men compare themselves with other men (Hobza, Walker, Yakushko, & Peugh, 2007). According to Festinger's (1954) Social Comparison Theory, individuals gain information about themselves through personal comparisons

to those they perceive as better than themselves. This "upward comparison," coupled with conformity to group pressure, may partially explain the influence of media on self-evaluations (Hobza et al., 2007). Social Comparison Theory suggests that the mechanism by which media exposure influences body image is appearance related social comparison, which is comparing one's appearance to that of others (Festinger, 1954; Suls & Wheeler, 2000; Wood, 1989). Many authors (Cattarin et al., 2000; Durkin &Paxton, 2002; Martin & Kennedy, 1993; Richins, 1991; Tiggemann & McGill, 2004) suggest that viewing television or reading magazines prompts individuals to evaluate their own appearance in comparison to the salient and highly attractive models who pervade such media. This comparison produces a negative evaluation of one's own physical appearance because the media portrays women who represent a thin ideal body (Cattarin et al., 2000; Durkin &Paxton, 2002; Martin & Kennedy, 1993; Richins, 1991; Tiggemann & McGill, 2004).

Sociocultural Theory. Sociocultural Theory offers the most powerful theoretical account for understanding the high levels of body dissatisfaction and disordered eating among women in Western Society (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). This model proposes that current societal beauty ideals are created and reinforced by a number of sociocultural influences, media being the most powerful and pervasive (Groesz, Levine, & Murnen, 2002). This cultural ideal influences women to want to achieve the ideal image which is young, tall, and extremely thin. Furthermore, this model suggests that the media sets unrealistic beauty standards, such as an almost impossible standard for thinness. As a result,

women suffer from psychological dispositions that lead them to engage in dangerous behaviors such as excessive exercising and dieting. Sociocultural theories of body image suggest that body dissatisfaction results from unrealistic societal beauty ideals, and one way of transmitting these ideals is through the mass media (Hargreaves & Tiggemann, 2004). Sociocultural theory provides the most strongly supported theoretical framework for understanding the complicated factors related to body image disturbance in women in western cultures (Bissell & Rask, 2010).

Magazines and Television Commercials. Advertisement is a type of media that plays an important role in the way men and women are portrayed. According to Johnson, McCreary, and Mills (2007), magazine ads aimed at men that depict the ideal musculature men are found in Men's Health, Men's Journal, and GQ and ads aimed at women that depict ideal slender women are found in Vogue, Harper's Bazaar, Vanity Fair, and Shape. Magazine ads often contain images of what media defines as attractive, and rarely is an average person portrayed. As a result, average men and women face the pressure of having to conform to the standards set by the media.

Previous studies have focused on examining the effects of media images portraying the thin or muscular ideal on men's and women's body image. These studies have shown that images portraying the thin ideal or muscular ideal do have a negative effect on men and women's body satisfaction, and that women show a higher level of restrained eating and a greater level of body dissatisfaction as compared to men (Ogden & Mundray, 1996).

Ogden and Mundray (1996) evaluated the effects of acute (short-term) exposure to magazine images that represented the cultural ideal (pictures that depicted thin models) for each gender and images of overweight individuals (pictures that depicted fat models). Men viewed five pictures of male fashion models that represented stereotypical attractive bodies (thin pictures). Women viewed five pictures of female fashion models that represented stereotypical attractive bodies (thin pictures). Images were selected because they represented the cultural ideal for each gender. Pictures of overweight men and women were used for the fat condition. It was predicted that women would be more sensitive to the media images than men and that the thin pictures would have a more detrimental effect on measures of body satisfaction than the fat pictures. Men and women were exposed to both conditions, the thin pictures and the fat pictures. Ogden and Mundray found that females showed a higher level of restrained eating compared to men. Results showed that females felt fatter overall compared to men, but both men and women felt fatter when looking at the thin pictures and felt thinner after viewing the fat pictures. Overall, men felt sexier than women, but both rated themselves less sexy and less attractive after viewing the thin pictures and sexier and more attractive after viewing the fat pictures. Women rated themselves as less toned than did men, but both rated themselves less toned after the thin pictures and more toned after the fat pictures. Men rated themselves as feeling fitter than did women, but both rated themselves as feeling fitter when exposed to the fat pictures and less fit when exposed to the thin pictures. Men and women were also provided with two sets of body silhouettes ranging from extremely

thin (1) to extremely obese (12). They were to rate one set for what they felt they looked like at that moment (*now score*) and the other for what they would want to look like (*preferred score*). For the *preferred score*, analysis showed no main effects of condition or time, but showed a main effect of gender with the means suggesting that women wanted to be thinner than did men (Ogden & Mundray, 1996). It was shown that, overall, men reported greater body satisfaction than women. Men rated themselves as less fat, sexier, more toned, and more fit compared to how women rated themselves. Results revealed that women were more concerned with weight while men tended to be more concerned with strength (Ogden & Mundray, 1996). Ogden and Mundray's study also provides evidence that acute exposure to stereotypical attractiveness can cause temporary deterioration in body satisfaction. Based on the findings, it was concluded that deterioration in body image in terms of factors such as fatness, feeling sexy, attractiveness, and feeling fit and toned were short-lived because participants were exposed to images for only five minutes. Also, although women showed greater body dissatisfaction, results concluded that men are also sensitive to media images of cultural norms that represent the cultural ideal and respond to these images in a similar direction to women (Ogden & Mundray, 1996).

Hargreaves and Tiggemann (2004) examined the effects of idealized television commercial images emphasizing thinness for girls, and muscularity for boys on adolescent's body dissatisfaction. It was hypothesized that girls exposed to thin-ideal images would report higher levels of body dissatisfaction than girls exposed to neutral images, and that boys exposed to muscular ideal images would report higher levels of

body dissatisfaction than boys exposed to neutral images. Boys and girls were randomly assigned to separate conditions. Girls were randomly assigned to the thin ideal condition which depicted thin and attractive female actors or the non-appearance neutral condition (did not contain any actors). Boys were randomly assigned to the muscular ideal condition which depicted muscular and attractive male actors or the non-appearance condition. Findings revealed that girls who viewed thin-ideal commercials had significantly greater body dissatisfaction than girls in the nonappearance commercial condition. However, boys in the muscular-ideal commercial condition did not show greater body dissatisfaction than boys in the nonappearance commercial condition (Hargreaves & Tiggemann, 2004). This could be due to boys developing a vulnerability to muscular ideal media images at a later age (late adolescence or early adulthood) than girls (Hargreaves & Tiggemann, 2004).

Harper and Tiggemann (2008) also examined the effects of media images portraying a thin ideal on women's body image. They were interested in examining if thin ideal images would affect women's self-objectification, appearance anxiety (anxiety about their appearance), mood, and body dissatisfaction. Self-objectification theory, as Fredrickson and Roberts (1997) described it, states that women are subject to cultural and interpersonal experiences in which the female body is inspected, evaluated, and treated as an object valued primarily for its use to others (Fredrickson & Roberts, 1997). As a result, women adopt an observer's perspective of their physical selves. Harper and Tiggemann hypothesized that participants who viewed the thin ideal images would report greater levels of state self-objectification, negative affect, anxiety,

and body dissatisfaction when compared to those who viewed neutral images (participants who viewed magazines advertisement that featured products without people). It was also predicted that participants who viewed images of thin-idealized women featuring an attractive man in the picture would report higher levels of state self-objectification, negative affect, appearance anxiety, and body dissatisfaction than women who only viewed images of thin-ideal women without a man. Harper and Tiggemann found that participants who viewed the thin ideal images, with or without a man, reported greater levels of state self-objectification than those in the neutral control condition and participants who viewed the thin ideal images reported greater levels of state self-objectification, appearance anxiety, negative mood, and body dissatisfaction compared to those in the neutral control condition. However, there were no differences in state self-objectification scores between thin ideal condition and thin ideal with a man condition. This study was the first to demonstrate that magazine advertisements featuring a thin, attractive female model produce greater state self-objectification than control advertisements (Harper & Tiggemann, 2008).

Television Programs

Magazine images and television advertisements are not the only media sources that influence the way women feel about themselves. Television program/shows are another way in which women are bombarded with the ideal image. Many studies have focused on images from magazines or TV commercials, but only a few have looked at TV programs. Want, Vickers, and Amos (2009) examined the effects of the television program “Friends,” which depicted thin and

highly attractive characters, on appearance satisfaction (how satisfied participants were with their appearance). There were four conditions. In the control condition, women were given the questionnaire measuring appearance satisfaction before viewing the television program "Friends." In the exposure condition, women were given the appearance satisfaction measure after viewing the television program. In the appearance intervention condition, women first read intervention material which informed them about the various ways in which the physical appearance of television actors is manipulated. The focus was on discussing the means by which actors' skin-tone, hair-style and facial characteristics are routinely altered through make-up, lighting and other cosmetic techniques. After reading through this material, they then watched the television program, and completed the measure for appearance satisfaction. In the last condition, weight and shape intervention, women read through material about how the body weight and shapes of television actors are not representative of the range of weight and shapes in the general population, the lengths that actors go to in order to maintain their weight, and the health implications of low Body Mass Index (e.g., eating disorders), and the idea that body weight may be partly determined by a genetically-influenced set-point. Women then watched the television program and completed the measure of body satisfaction. Researchers predicted that women in the exposure condition would report lower appearance satisfaction than women in the control condition. They also predicted that women who viewed the television program, and who also read the intervention material would rate their satisfaction with appearance significantly higher than those who did not read the

intervention material. Although the women being portrayed in the show were real, and participants were not explicitly instructed to focus on women's appearance, findings revealed that for women in the exposure condition, their appearance satisfaction was significantly detrimentally affected following exposure to the television program compared to the control condition women who saw the program after completing measures of appearance satisfaction. As for the second hypothesis, participants who read the shape and weight material before viewing the television program were significantly more satisfied with their appearance than those exposed to the television program alone. Findings demonstrated that although television is viewed for entertainment, it is possible that the thin and attractive women portrayed decrease viewer's satisfaction of their own appearance (Want et al., 2009)

Television Programs Showing Women Undergoing Plastic Surgery Procedure

A newer form of exposure to ideal images has become very popular over the years. Reality TV cosmetic surgery make-over programs appear regularly on U.S. network and cable television. Extreme Makeover which depicts ordinary individuals undergoing plastic surgery, exercise regimens, hairdressing and wardrobing, was the second highest rated program for adults under age 50 in 2003 (Sarwer & Crerand, 2004). The popularity of these programs coincides with the overall rise in cosmetic surgical procedures. According to Sarwer and Crerand, (2004) the number of cosmetic treatments performed in the United States between 1992 and 2002 increased 1600%, with an estimated 8.3 million of individuals undergoing cosmetic medical procedures in 2003 (Sarwer et al., 2005).

There are television programs that show women undergoing a series of procedures in which multiple body parts are transformed to meet Western cultural ideals of feminine attractiveness. On the typical reality makeover program, women undergo a full body critique, in which numerous surgeries are recommended to address multiple perceived flaws. Although there is an increased prevalence and popularity of cosmetic surgery and makeover programs, there have been few investigations regarding the impact of these programs on viewers (Mazzeo, Trace, Mitchell, & Gow, 2007). One concern about these programs is that they actively promote the idea that a "perfect body" is attainable. Given the lack of research on this topic, Mazzeo et al., 2007, examined the effects of a popular program, *The Swan,* on college women. Mazzeo et al. were the first to test the effects of a cosmetic surgery reality TV program on women's self-esteem, mood, body dissatisfaction, anxiety, and eating restraint. Women were randomly assigned to one of two conditions, experimental group (watched an episode of *The Swan*), or the control group (watched an episode of *Clean Sweep*). *The Swan* presents the story of two women per episode who undergo an extensive transformation involving multiple plastic surgeries, an intense diet and exercise program, and counseling. *Clean Sweep* involves organizing and redecorating a room in a home. Findings revealed that women high in thin internalization (girls with higher baseline scores on measures of pressure to be thin and body dissatisfaction) were most likely to report decreases in self-esteem after exposure to the cosmetic TV program (Mazzeo et al., 2007). Results for the full sample (all women who participated in the study) revealed that women in the

experimental group reported lower levels of body satisfaction compared to women in the control group. Also, women in the experimental group reported higher eating restraint compared to women in the control group. No differences were found between groups for mood and anxiety.

What about Men? Although men were not included in the present study, it is important to note how men are also affected by the media**.** The media places pressure on men to have a musculature body ideal. Between 28% and 68% of normal weight adolescent boys and young men feel that they are underweight and want to gain weight and muscle (McCreary & Sasse, 2000). About three million men in North America are believed to be using anabolic-androgenic steroids or other harmful drugs to increase muscularity. An equally large, albeit understudied, group of men have developed eating disorders, and another million or more men have developed body dysmorphic disorder-an excessive preoccupation with perceived flaws in their physical appearance (Pope et al., 2000).

Leit, Gray, and Pope **(**2002) examined the effects of media's portrayal of the ideal physique (muscular men taken from popular magazines) on men. Men exposed to images of males with the ideal physique were expected to display lower levels of body satisfaction than men exposed to neutral images. As expected, men who viewed images portraying males with the ideal physique reported higher levels of body dissatisfaction compared to men exposed to neutral images (Leit et al., 2002). Although women have been shown to be more negatively affected by the media compared to men, men also report similar negative effects (Ogden & Mundray, 1996).

Factors that Reduce the Negative Impact of Media Images. Based on past research, it is evident that women are negatively affected by media's portrayal of the ideal body image. However, there are many factors that help ameliorate the negative effects that media's portrayal of the thin ideal has on women's body image.

*Average Weight Models***.** Fister and Smith (2004) examined whether women exposed to realistic, average weight models would feel more capable, confident, in control, self-reliant attractive, and respected by others than women exposed to thin models. It was reported that high-risk women (women who scored high on measures of internalization of the thin ideal, body dissatisfaction, and drive for thinness) exposed to average-weight model images were less likely to endorse thinness/restricting expectancies than those who were exposed to thin models or to control images (Fister & Smith, 2004). These findings showed that exposure to realistic images lessens the risk of thinness/restricting expectancies. The authors didn't report findings for low-risk women.

Intervention Videos

Past research has evaluated interventions aimed at reducing body dissatisfaction resulting from exposure to media images. Many of the interventions used in studies include a media literacy component, which involves having people analyze the content of media messages. The purpose of analyzing the content is to prevent the internalization of thinness as an appearance ideal and reduce the frequency of social comparisons with media models (Levine & Piran, 2004). The

media literacy component provides participants with information about the techniques used to digitally alter the images.

Posavac, Posavac, and Weigel (2001) and Yamamiya, Cash, Melnyk, and Posavac (2005) examined whether media literacy interventions can disrupt social comparisons to media images and prevent negative exposure effects. One intervention provided information about "Artificial Beauty," which highlighted the inappropriate ideals portrayed in the media and informed participants about the techniques used to produce these images. The other intervention provided information about "Genetic Realities" and explained that women are biologically predisposed to be heavier than the models shown in the media. In both studies, the non-intervention groups showed negative media exposure effects, whereas the interventions significantly reduced this effect.

Halliwell, Easun, and Harcourt (2011) evaluated whether a brief intervention video revealing the artificial nature of media images would protect girls from negative media exposure effects and body dissatisfaction. The specific video was an "Evolution" video produced by Dove intended to depict the artificial nature of media images. The video focused on a young women facing the camera whose photo was taken and then digitally altered. The video showed the alterations to a model's face and included showing how the dimensions of the face and neck were digitally altered (Halliwell et al., 2011). It was hypothesized that without any intervention, girls exposed to thin ideal images would report greater levels of body dissatisfaction and lower levels of self-esteem compared to those exposed to neutral images. It was also

hypothesized that with the intervention video, there would be no differences in body satisfaction and self-esteem between girls who viewed the thin images and girls who viewed the neutral images (Halliwell et al., 2011). Findings showed that providing girls with an intervention video demonstrating the true nature of the images portrayed by the media protected girls from negative media exposure effects and body dissatisfaction, and prevented the negative effects that follow exposure to ultra-thin models (Halliwell et al., 2011).

Disclaimer and Warning Labels on-Digitally Altering Media Images

Because women are led to believe the body portrayed by the media is attainable, policy makers across a number of Western countries have suggested that warning labels be placed on the media images to inform women that the images have been digitally altered (Slater, Tiggemann, Firth, & Hawkins, 2012). Policy makers across a number of Western countries believed that the warning labels would reduce the negative effects that media images have on women's self-perception. In France, it has become illegal to print digitally retouched or enhanced images without some form of disclaimer or warning label (Erlanger, 2009). This warning label or disclaimer informs consumers of the unrealistic nature of the images. Politicians from the United Kingdom, The British Royal College of Psychiatrists, and a National Advisory Group on Body Image in Australia are currently campaigning for disclaimers to accompany digitally enhanced images of models and celebrities as well as for a complete ban on digital enhancement for advertisement that target young people less than sixteen years of age (Duffett, 2009). The Advisory Group on Body Image also proposed a

Voluntary Industry Code of Conduct which recommends a number of strategies such as using a diverse range of models in terms of size and shape, ensuring that models are over sixteen years of age and are of a healthy weight, limiting the use of digital technology, and making consumers aware of the extent to which images were digitally altered for reducing the impact of the thin ideal (National Advisory Group on Body Image, 2009).

Slater, Tiggemann, Firth, and Hawkins (2012) were interested in examining the effects that warning labels on altered images had on women's mood and body dissatisfaction. They used "generic labels," which informed readers that the image was digitally altered, and "specific labels," which informed readers of particular body parts that had been enhanced in the image. According to the logic of the sociocultural model which proposes the idea that societal beauty ideals are created and reinforced by a number of sociocultural influences, the addition of warning labels should reduce the negative effects of exposure to idealized media images (Slater et al., 2012). In this study, women who were exposed to images with warning labels were expected to report lower levels of negative mood and body dissatisfaction than women exposed to images without a warning label. It was also predicted that specific warning labels would result in lower levels of negative mood and body dissatisfaction compared to generic labels. Women exposed to images with the warning labels were expected to perceive the images as less realistic than images without a warning label. The findings revealed that women exposed to images with warning labels (generic or specific) showed lower levels of body dissatisfaction compared to women exposed to

images without warning labels. The labels served to ameliorate the negative effects of exposure to thin ideal media images (Slater et al., 2012). It was also revealed that women exposed to images with warning labels perceived images as less realistic and not relevant to compare themselves with or aspire to. It appears that labels (specific or generic) serve to remind women that the models in the fashion spreads are not appropriate comparisons because they are not realistic, nor attainable ideals for the average weight woman (Slater et al., 2012). Although the labels did appear to have a significant effect on women's body dissatisfaction, no differences were found between women exposed to the specific labels and women exposed to the generic labels. For mood, there was no significant effect of label type or label and no label conditions. The findings provided the first evidence that the use of warning labels may help to ameliorate some of the known negative effects of viewing media images that feature the thin ideal (Slater et al., 2012).

To build on past research supporting the idea that warning labels help ameliorate the negative effects of viewing images that feature the thin ideal, Ata, Thompson, and Small (2013) examined the effects of warning labels and disclaimers on women's body dissatisfaction and intent to diet. Participants were randomly assigned to one of four conditions: disclaimer (disclaimer labels provided information about the image being retouched to change a model's physical appearance), warning (warning label warned the participant that trying to look as thin as the models may be dangerous to health), model control (original, unaltered copies of the advertisements), or car control (car advertisement). Based on previous findings, it was expected that a

disclaimer or warning label would reduce female's body dissatisfaction and intent to diet. Interestingly, inclusion of disclaimer or warning label did not have an effect from pre to post exposure on body dissatisfaction or intent to diet, and only the car control group reported a decrease in body dissatisfaction over time (Ata et al., 2013).

Although many women aim at looking similar to what media portrays as the "ideal image", they place importance on different parts of their bodies. Men place importance on muscle definition and leanness, while women place importance on thinness.

The Present Study. Although findings have revealed the negative effects of exposure to media's images portraying the ideal image and emphasizing the thin ideal, there is not enough research on the effects of warning labels on women's body image. With that being said, it would be interesting to see if media images with warning labels that inform the readers of the unrealistic nature of the images would have positive effects on women's body image or at least not have negative effects.

Statement of Purpose. The purpose of this study was to add to past research which has shown that media which portrays an ideal body image negatively impacts the way women feel about themselves. More specifically, the aim of this study was to examine whether short-term exposure to media images portraying an ideal body had an effect on women's body satisfaction, mood, self-esteem, and social comparison. Also, this study examined if media images with warning labels that inform the readers of the unrealistic nature of the images had positive effects on women's body image or at least not have negative effects. This study consisted of four groups: a group

exposed to digitally altered images with a warning label (informing participants that the image has be digitally altered), a group exposed to digitally altered images without a warning label, a group exposed to unaltered images, and a group exposed to neutral images. This study will also explore differences between the digitally altered group with a warning label, the digitally altered group without a warning label, the unaltered group, and the neutral group.

Hypotheses. The present study consisted of one independent variable (type of media images condition) with four levels (digitally altered images with a warning label, digitally altered images without a warning label, unaltered images, and neutral images).

1a) Participants in the digitally altered images without a warning label condition would report higher levels of body dissatisfaction when compared to participants in the digitally altered images with a warning label condition, unaltered images condition, and neutral images condition.

1b) Participants in the neutral images condition would report lower levels of body dissatisfaction compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition.

2a) Participants in the digitally altered images without a warning label condition would report lower levels of mood (higher negative affect and lower positive affect) when compared to participants in the digitally altered images with a warning label condition, unaltered images condition, and neutral images condition.

2b) Participants in the neutral images condition would report higher levels of mood (higher positive affect and lower negative affect) compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition.

3a) Participants in the digitally altered images without a warning label condition would report lower levels of self-esteem when compared to participants in the digitally altered images with a warning label condition, unaltered images condition, and neutral images condition.

3b) Participants in the neutral images condition would report higher levels of self-esteem compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition.

4a) Participants in the digitally altered images without a warning label condition would report higher levels of social comparison when compared to participants in the digitally altered images with a warning label condition, unaltered images condition, and neutral images condition.

4b) Participants in the neutral images condition would report lower levels of social comparison compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition.

CHAPTER II

METHODS SECTION

Participants

Participants for this study included 169, California State University, Stanislaus female students, ages 18 and older (*M* = 21.79, *SD* = 6.78). Out of the 169 participants who completed the study, 27.8% were Caucasian, 47.3% Hispanic, 14.8% Asian/Pacific Islander, 4.7% African American, and 5.3% Other. The average BMI was *M* = 25.56, *SD* = 6.37. For history of an eating disorder, 7.1% reported "yes" to having a history of an eating disorder and 92.9% reported "no" history of an eating disorder. Of this sample, 34.3% were Freshman, 16%-Sophomore, 23.7%-Junior, 23.1%-Senior, 2.4%-Other. Participants were recruited through California State University Stanislaus psychology department participant subject pool, SONA. The study was conducted on Qualtrics, and students were directed from SONA to Qualtrics where they completed the study. The compensation students received was extra credit points (if offered by their instructor) for their participation.

Materials

The materials I utilized for this study were the following: Informed consent (Appendix A), 10 digitally altered images with a warning label (Appendix B), 10 digitally altered images without a warning label (Appendix C), 10 unaltered images portraying a woman representing the thin ideal (Appendix D), 10 neutral images that did not portray a female or focused on a woman's body or physical appearance

(Appendix E), Visual Analogue scale used to rate images that feature a female (Appendix F), Visual analogue scale used to rate neutral images (Appendix G), a demographic questionnaire (Appendix H) that was given after the study was completed and consisted of questions assessing age, ethnic background, class level, gender, history of eating disorders, height, weight, and debriefing (Appendix I).

The Body Shape Questionnaire-brief version (BSQ-8C) (Appendix J) was utilized to measure participant's body satisfaction (Cooper, Taylor, Cooper, & Fairburn, 1987). This instrument consists of 8 items that assess body shape preoccupations, feelings of body dissatisfaction, and concern with weight and shape. It is rated on a 6-point scale, ranging from 1 (never) to 6 (always). Each item is given a score from 1 to 6. Scores for these items were added. The sum of all 8 questions was participant's score for BSQ. The score for the BSQ ranged from 8-48. A higher score indicated higher levels of concern with body. Sample questions included *"Have you felt excessively large and rounded,"* and "*Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?"* The brief form of BSQ has been reported to have internal validity of .84 (Evans & Dolan, 1993).

The Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) (Appendix K) was utilized to measure mood. This instrument consists of a number of words that describe different positive and negative feelings and emotions. Participants rated the extent to which they experienced each of the 10 negative mood states (e.g., distressed or hostile) on a 5-point rating scale (ranging from very slightly or not at all to extremely) and the extent to which they experience

each of the 10 positive states (enthusiastic, excited, strong) on a 5-point rating scale (ranging from very slightly or not at all to extremely). There were two different subscales (positive affect and negative affect). Each item was given a score from 1 to 5. For positive affect, the following items were added together: 1, 3, 5, 9, 10, 12, 14, 16, 17, and 19. The sum of all of these 10 items was participant's positive affect score. For negative affect, the following items were added together: 2, 4, 6, 7, 8, 11, 13, 15, 18, and 20. The sum of all of these 10 items was participant's negative affect score. Scores ranged from 10-50. For positive affect, higher scores represented higher levels of positive affect, and for negative affect, lowers scores represented lower levels of negative affect. Watson et al. reported Cronbach's alpha coefficients to range from .86 to .90 for the Positive Affect scale and .84 to .87 for the Negative Affect scale. The authors also reported evidence for the validity of the PANAS and measures of general distress and dysfunction, depression, and state anxiety were more highly correlated with the Negative Affect scale (positive correlations) than the Positive Affect scale (negative correlations).

The Rosenberg Self-Esteem Scale (Appendix L) was utilized to measure self-esteem (Rosenberg, 1965). This scale is a 10-item scale that measures global self-worth by measuring both positive and negative feelings about self. Items are answered using a 4-point scale ranging from strongly agree to strongly disagree. Items were given a score from 1-4. Items 2, 5, 6, 8, 9 were reverse scored. Scores for all 10 items were added together, and the total number was participant's self-esteem score. Scores ranged from 10-40. Higher scores on this scale indicate higher self-

esteem. Items included *"On the whole, I am satisfied with myself,"* and *"At times I think I am no good at all."* Internal reliability has been reported to be .91.

The Physical Appearance Comparison Scale (PACS; Thompson, Heinberg, & Tantleff, 1991) (Appendix M) was utilized to measure social comparison. This scale consists of 5-items that assess an individual's tendency to compare their own appearance to the appearance of others (Thompson et al., 1991). Participants rated items on a 5 point Likert scale ranging from 1= (never) to 5 = (always). Items were given a score from 1 to 5. The average of all 5 questions was calculated to obtain participants score for PACS. Item 4 was reverse scored. Scores range from 8-40. Higher scores indicated higher comparison. Questions included *"At parties or other social events, I compare my physical appearance to the physical appearance of others,"* and *"The best way for a person to know if they are overweight or underweight is to compare their figure to the figure of others."* Thompson et al. (1991) reported an adequate internal consistency coefficient of $\alpha = .78$, and test-retest reliability was .72, while other studies have reported marginal internal consistency of $\alpha = .70$ (Vander Wal, 2000).

Finally, participants' Body Mass Index (BMI) was calculated using the following formula: (weight (lbs)/height^2 (in.))*703.

Design. This study was a between subjects. The independent variable was type of media image condition, and participants were randomly assigned to one of the four levels:

1) Digitally altered images with a warning label (informing participants that the image has been digitally altered). Digitally altered images were images that had been digitally enhanced or altered in any way or form to promote the thin ideal. Images with a warning label were media images portraying a woman representing the thin ideal with a warning label informing participants that the image had been digitally altered. An example of the warning label was, “This photo has been manipulated to change the model's physical appearance.”

2) Digitally altered images without a warning label.

3) Unaltered images. Unaltered images were images that had not been enhanced or altered in any way or form. These images were the unaltered versions of the altered images.

4) Neutral images. Neutral images were cosmetic makeup images that did not portray a man or a woman. (Refer to Appendices B, C, D, and E for examples of the images).

The dependent variables were women’s body satisfaction, self-esteem, social comparison, and mood. Body dissatisfaction was measured using the Body Shape Questionnaire, self-esteem was measured using the Rosenberg Self-Esteem Scale, social comparison was measured using the Physical Appearance Comparison Scale, and positive and negative mood was measured using the PANAS.

Procedures. This study was conducted online. Participants were recruited through the California State University, Stanislaus psychology department online subject pool, SONA (http://csustan.sona-systems.com/). Students were directed from SONA to Qualtrics where they completed the online study. If participants agreed to

the informed consent, they were randomly assigned to one of the four conditions: group exposed to digitally altered images with a warning label, group exposed to digitally altered images without a warning label, group exposed to unaltered images, and group exposed to neutral images. Participants in all conditions viewed a total of 10 images. The order of all the images was randomized**.** Participants in all conditions viewed each image for 15 seconds. Participants who viewed the images featuring a female focused their attention onto the image by rating each image on attractiveness, sexiness, and fatness using a Visual Analogue Scale. Participants who viewed the neutral images focused their attention onto the image by rating pieces of cosmetic makeup on a Visual Analogue Scale. After participants viewed all 10 images belonging to their condition, they completed all measures in random order: Body Shape Questionnaire, Rosenberg Self-Esteem Scale, Physical Appearance Comparison Scale, and the Positive and Negative Affect Schedule. There was no time limit for completing the measures. Once participants completed all measures, they completed the demographics questionnaire. After participants were finished completing the demographics questionnaire, they viewed a short intervention video "*Photoshopping Real Women Into Cover Models"* (https://www.youtube.com/watch?v=zRlpIkH3b5I). This video was intended to show participants what goes into creating the "ideal image." Finally, participants were shown a debriefing form.

CHAPTER III

RESULTS

Exclusion of Participants

Data was collected over a period of approximately four months. There was a total of 173 participants prior to any of them being dropped from the study. Participants that did not answer one of the questions on any of the measures (PACS, PANAS, BSQ, RSES) were excluded from the study. For example, the PACS has five questions, participants that either chose not to answer one of the 5 questions, or forgot to answer one of the 5 questions, were excluded from the study and responses to all other measures were not analyzed. Participants who did not answer one of the demographic questionnaire questions were still included in the study and responses were analyzed. For example, if participants did not answer what their height or weight was, they were still included in the study. After exclusion of participants, there was a total of 169 participants.

Hypotheses Tests

I conducted a series of One-Way ANOVA tests to test my hypotheses. Post-Hoc-Bonferroni tests were conducted to explore pairwise comparisons.

Body Dissatisfaction. A One-way ANOVA was conducted to examine the effects of image condition on body dissatisfaction. It was hypothesized that: 1a) Participants in the digitally altered images without a warning label condition would report higher levels of body dissatisfaction when compared to participants in the

digitally altered images with a warning label condition, unaltered images condition, and neutral images condition, and 1b) Participants in the neutral images condition would report lower levels of body dissatisfaction compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition. Findings revealed there was no significant difference between conditions $F(3,165) = 1.379$, $p = .251$. The direction of the results was not as expected. Although the results were not statistically significant, participants in the digitally altered images with a warning label condition tended to report higher levels of body dissatisfaction than did participants in the other conditions (see Figure 1). The effect size for body dissatisfaction was $\eta^2 = .024$.

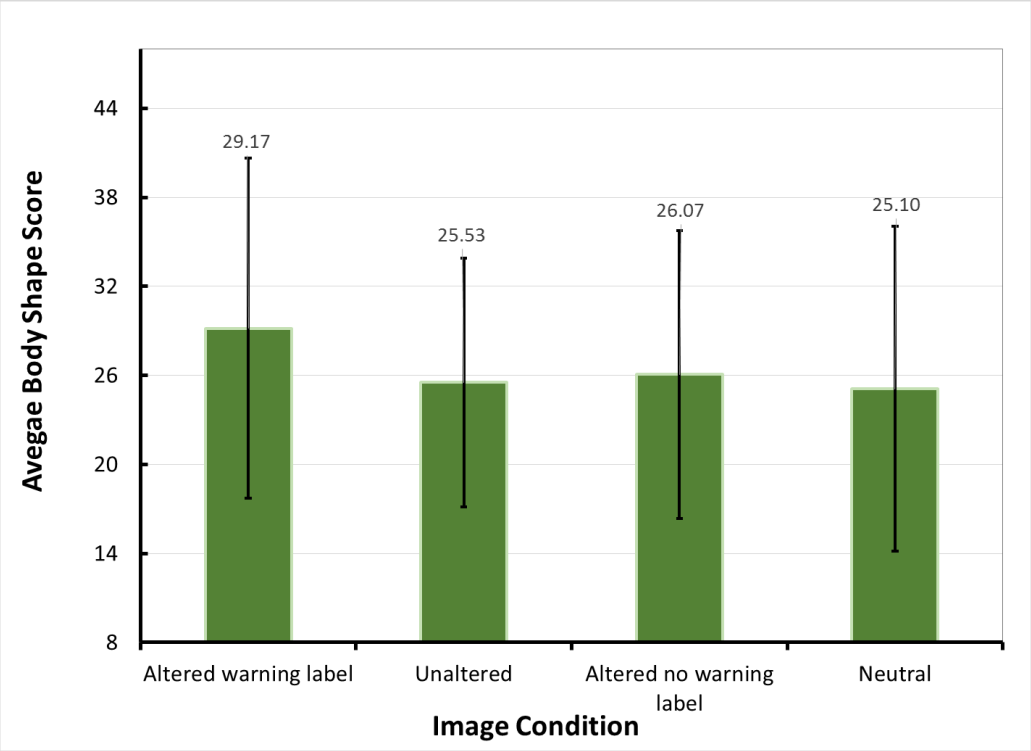


Figure 1: Average scores for body dissatisfaction. Errors bars represent +/ – 1 standard deviations.

Positive and Negative Affect. It was hypothesized that: 2a) Participants in the digitally altered images without a warning label condition would report lower levels of mood (higher negative affect and lower positive affect) when compared to participants in the digitally altered images with a warning label condition, unaltered images condition, and neutral images condition, and 2b) Participants in the neutral images condition would report higher levels of mood (higher positive affect and lower negative affect) compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition.

A one-way ANOVA test was conducted to examine the effects of image condition on positive mood. Findings revealed there was a significant difference between conditions $F(3,164) = 2.943$, $p = .035$. A Post-Hoc-Bonferroni test revealed there was a significant difference between participants in the digitally altered images with a warning label condition and participants in the neutral condition, $p = .026$**.** Results were not in the expected direction. Participants in the digitally altered images with a warning label condition *(M* = 26.90, *SD* = 9.85) reported lower levels of positive affect compared to participants in the neutral condition *(M* = 32.93, *SD* = 8.62) who reported higher levels of positive affect. There were no significant differences found for any of the other groups, *p*s > .05 (See Figure 2)**.** The effect size for positive affect was $\eta^2 = .051$.

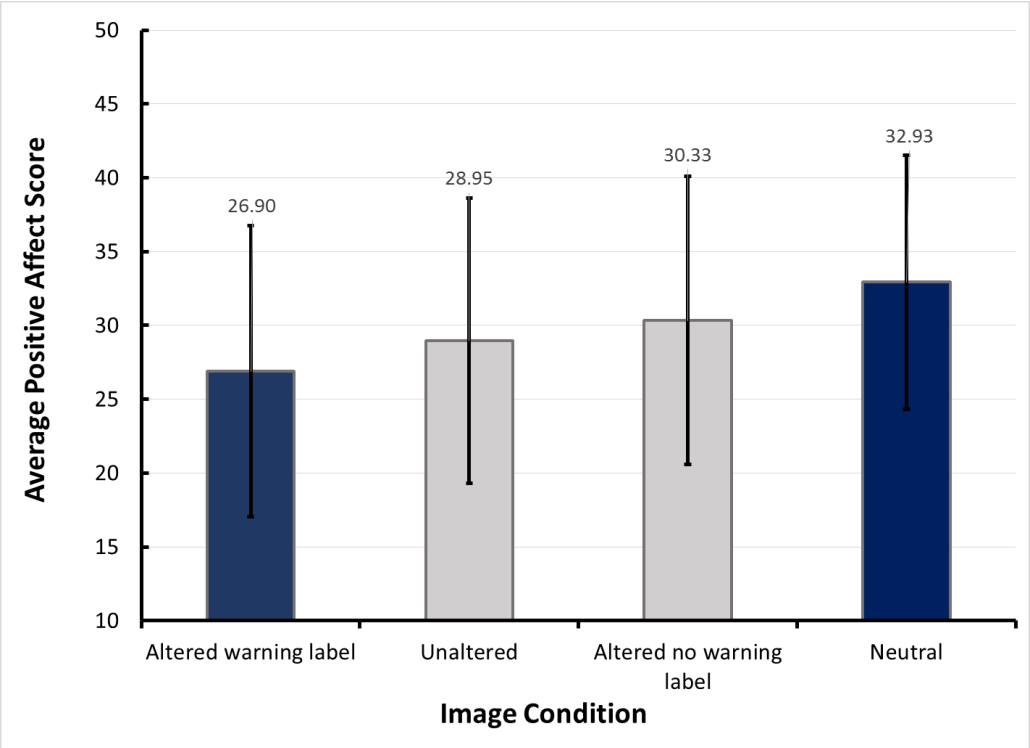


Figure 2: Average scores for positive affect. Errors bars represent +/ – 1 standard deviations. Blue bars represent groups that were significantly different.

A one-way ANOVA test was conducted to examine the effects of image condition on negative mood. Findings showed there was no significant difference between conditions for negative affect, $F(3,164) = 0.252$, $p = .860$ (See Figure 3). The effect size for negative affect was $\eta^2 = .005$.

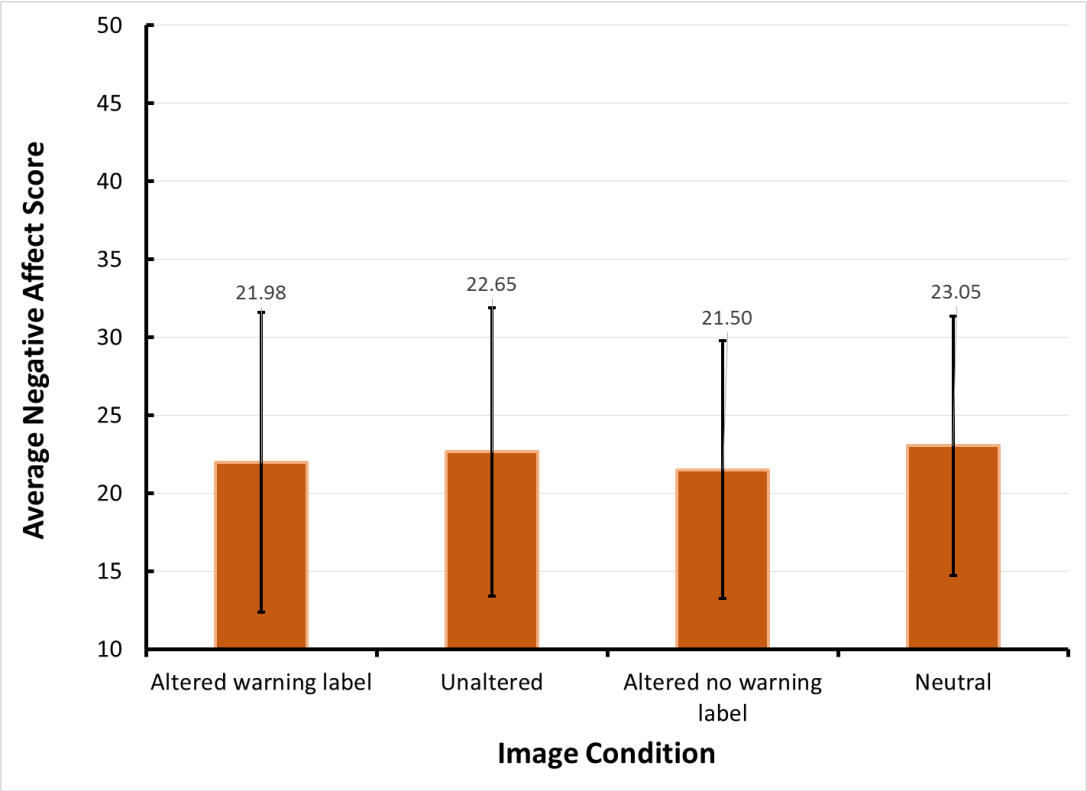


Figure 3: Average scores for negative affect. Errors bars represent +/ – 1 standard deviations.

Self-Esteem. A one-way ANOVA was conducted to examine the effects of image condition on self-esteem. It was hypothesized that: 3a) Participants in the digitally altered images without a warning label condition would report lower levels of self-esteem when compared to participants in the digitally altered images with a warning label condition, unaltered images condition, and neutral images condition, and 3b) Participants in the neutral images condition would report higher levels of self-esteem compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition. Results revealed there was no significant difference between

conditions $F(3,164) = 0.150$, $p = .929$ (See Figure 4). The effect size for self-esteem was $\eta^2 = .003$.

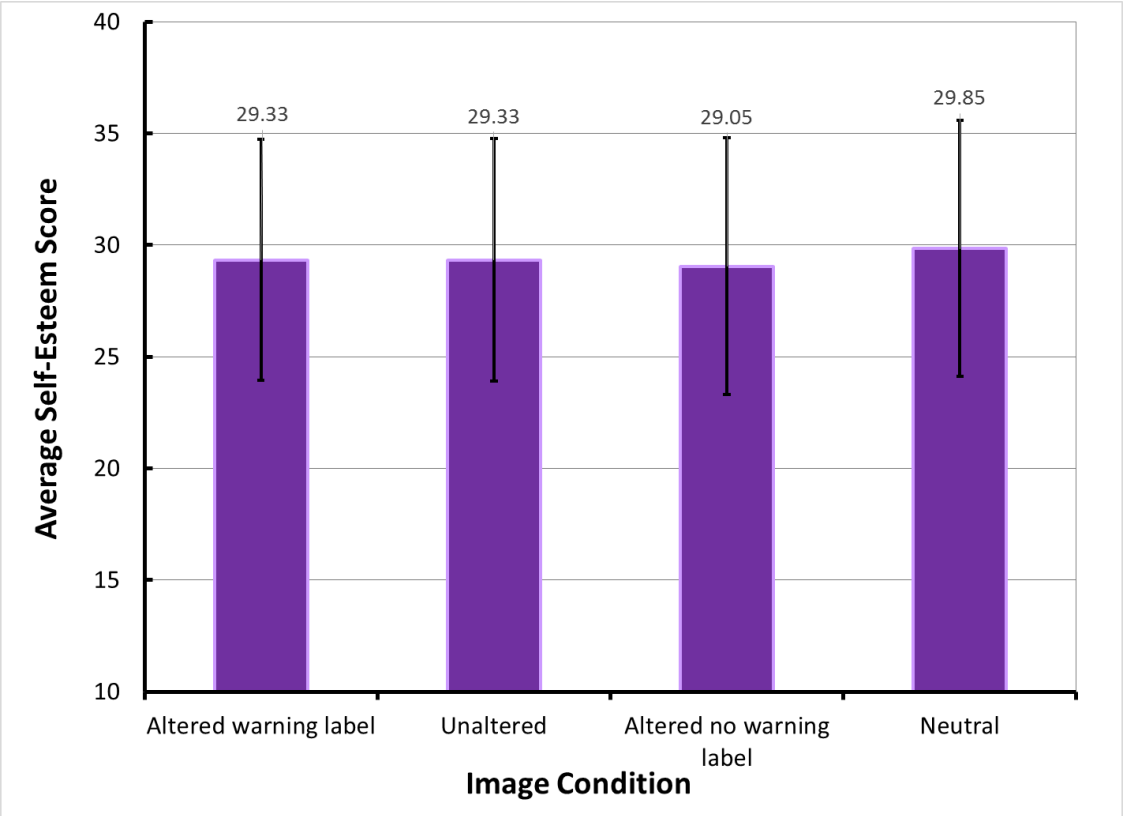


Figure 4: Average scores for self-esteem. Errors bars represent +/ – 1 standard deviations.

Social Comparison

A One-Way ANOVA was conducted to measure the effects of image condition on social comparison. It was hypothesized that 4a) Participants in the digitally altered images without a warning label condition would report higher levels of social comparison when compared to participants in the digitally altered images with a warning label condition, unaltered images condition, and neutral images condition, and 4b) Participants in the neutral images condition would report lower levels of

social comparison compared to participants in the digitally altered images without a warning label condition, digitally altered images with a warning label condition, and unaltered images condition. Results revealed there was no significant difference between conditions $F(3,165) = 0.341$, $p = .796$ (See Figure 5). The effect size for social comparison was $\eta^2 = .006$.

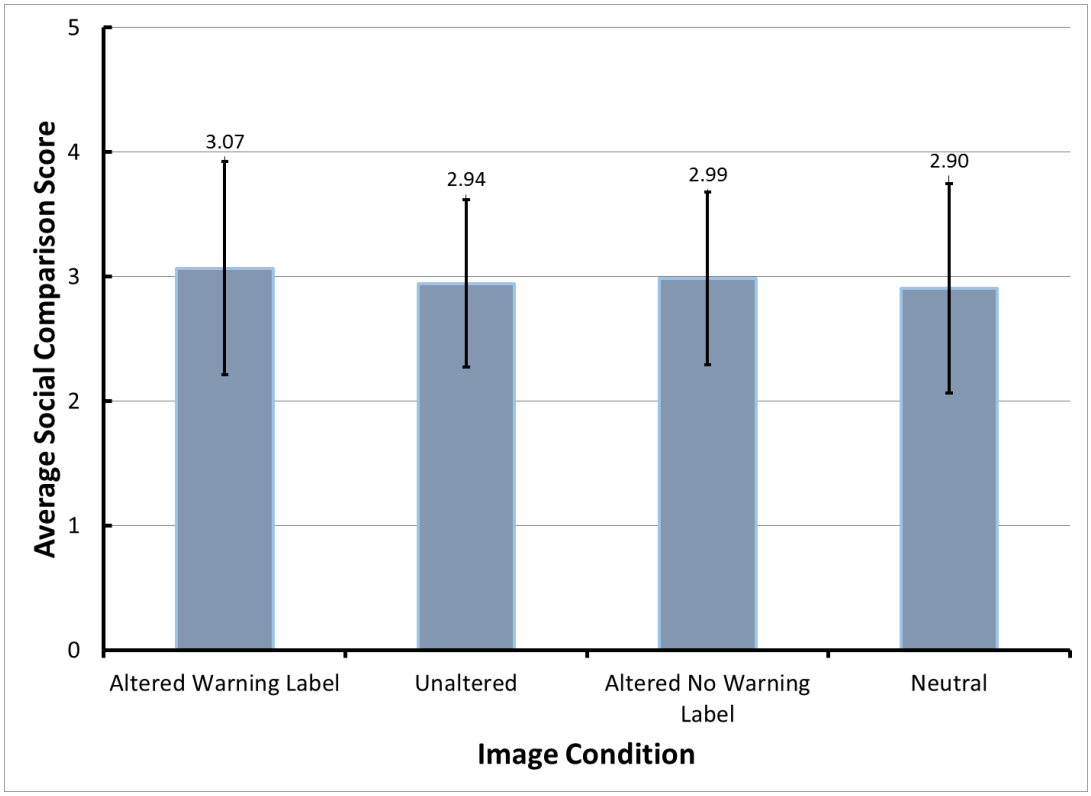


Figure 5: Average scores for social comparison. Errors bars represent +/– 1 standard deviations.

Manipulation Check

Additional One-Way ANOVA tests were conducted to explore the effects of image condition on ratings of models' attractiveness, sexiness, and fatness. Participants in the neutral condition were not included for this test, as they completed

different ratings for the neutral images. A one-way ANOVA test revealed there was a significant difference between conditions on ratings of attractiveness, $F(2,124) = 4.43$, $p = .014$. A Post Hoc-Bonferroni test revealed that participants in the digitally altered with a warning label condition rated models significantly higher on attractiveness ($M = 6.95$, $SD = 1.90$) compared to participants in the unaltered images condition ($M = 5.81$, $SD = 1.81$), $p = .01$. There were no significant differences found between the other groups, ps > .05. The effect size for ratings on attractiveness was $\eta^2 = .067$.

A one-way ANOVA revealed there was a significant difference between conditions on ratings of sexiness, $F(2,24) = 5.69$, $p = .004$. A Post-Hoc-Bonferroni showed that participants in the digitally altered with a warning label condition rated models significantly higher on sexiness ($M = 6.74$, $SD = 1.99$) compared to participants in the unaltered images condition ($M = 5.45$, $SD = 1.76$), $p = .005$. The test also showed that participants in the digitally altered without a warning label condition rated models significantly higher on sexiness ($M = 6.42$, $SD = 1.75$) compared to participant's in the unaltered images condition ($M = 5.45$, $SD = 1.76$), $p = .049$. There were no significant differences between the digitally altered with a warning label condition and the digitally altered without a warning label condition, $p > .05$. The effect size for ratings on sexiness was $\eta^2 = .272$.

Additionally, a one-way ANOVA revealed there was a significant difference between conditions on ratings of fatness, $F(2,24) = 23.22$, $p < .001$. A Post-Hoc Bonferroni test revealed that participants in the unaltered images condition rated

models significantly higher on fatness (M = 3.21, SD = 1.58) compared to participants in the digitally altered with a warning label condition (M = 1.39, SD = 1.53), $p < .001$. Additionally, participants in the unaltered images condition rated models significantly higher on fatness (M = 3.21, SD = 1.58) compared to participants in the digitally altered without a warning label condition (M = 1.39, SD = 1.10), $p = .001$. There were no significant differences between the digitally altered with a warning label condition and digitally altered without a warning label condition, $p > .05$. The effect size for ratings on fatness was $\eta^2 = .08$. See Figure 6 for means and standard deviations for attractiveness, sexiness, and fatness.

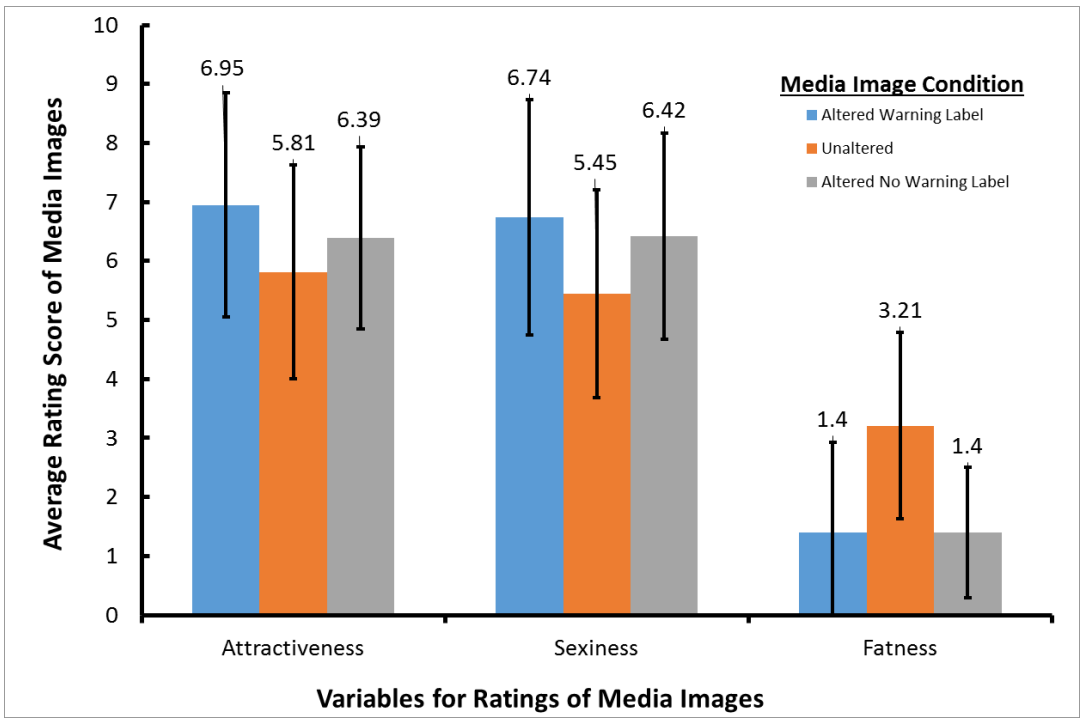


Figure 6: Average scores for attractiveness, sexiness, and fatness. Errors bars represent + /– 1 standard deviations.

Relationship between BMI and Dependent Variables. A Pearson correlation coefficient was calculated to examine the relationship between BMI and body dissatisfaction. A significant positive correlation was found ($r(163) = .283$, $p < .001$), indicating a significant weak to moderate relationship between the two variables. People with a higher BMI tended to report higher levels of body dissatisfaction. Separate Pearson correlation coefficients were also calculated to examine the relationship between BMI and body dissatisfaction for each media image condition. Significant moderate positive correlations were found for the unaltered without a warning label ($r(41) = .446$, $p = .003$) and the digitally altered without a warning label ($r(40) = .310$, $p = .049$) conditions. Correlations for the other image conditions were not significant, *p*s > .05.

A Pearson correlation coefficient was calculated to examine the relationship between BMI and positive affect. A weak non-significant, negative correlation was found ($r(162) = -.083$, $p = .290$). BMI was not related to positive affect. Separate Pearson correlation coefficients were also calculated to examine the relationship between BMI and positive affect for each media image condition. None of the individual correlations were significant, *p*s > .05.

A Pearson correlation coefficient was calculated to examine the relationship between BMI and negative affect. A weak, non-significant negative correlation was found ($r(162) = -.013$, $p = .871$). BMI was not related to negative affect. Separate Pearson correlation coefficients were also calculated to examine the relationship

between BMI and negative affect for each media image condition. None of the individual correlations were significant, *p*s > .05.

A Pearson correlation coefficient was calculated to examine the relationship between BMI and self-esteem. A significant negative correlation was found ($r(162) = -.203$, $p = .009$), indicating a weak relationship between the two variables. People with a higher BMI tended to report lower levels of self-esteem. Separate Pearson correlation coefficients were also calculated to examine the relationship between BMI and self-esteem for each media image condition. Marginally significant moderate negative correlations were found for the unaltered without a warning label ($r(41) = -.293$, $p = .056$) and the digitally altered without a warning label ($r(162) = -.309$, $p = .05$) conditions. Correlations for the other image conditions were not significant, *p*s > .05.

A Pearson correlation coefficient was calculated to examine the relationship between BMI and social comparison. A weak, non-significant positive correlation was found ($r(163) = .031$, $p = .694$). Separate Pearson correlation coefficients were also calculated to examine the relationship between BMI and social comparison for each media image condition. Correlations for all four conditions were not significant, *p*s > .05.

CHAPTER IV

DISCUSSION AND RECOMMNEDATIONS

The study's primary objective was to examine the effects of media images with and without a warning label on women's body dissatisfaction, mood, self-esteem, and social comparison. A series of One-Way ANOVA's were conducted to determine if there was a significant difference between conditions on these four measures.

Overview of Major Findings

This study found that overall there was no significant difference between conditions (digitally altered image with warning label, digitally altered images without a warning label, unaltered images, and neutral images) on measures of body dissatisfaction, mood, self-esteem, and social comparison.

When examining body dissatisfaction, I expected for participants in the neutral condition to report lower levels of body dissatisfaction, and participants in the digitally altered without a warning label condition to report higher levels of body dissatisfaction. Findings showed that there was no significant effect of image condition on body dissatisfaction. However, the pattern of findings was partially in the expected direction. Participants in the neutral condition tended to report lower levels of body dissatisfaction compared to participants in the other conditions. On the other hand, contrary to my hypothesis, participants in the digitally altered without a warning label condition did not report higher levels of body dissatisfaction.

Interestingly, participants in the digitally altered with a warning label condition tended to report higher levels of body dissatisfaction than participants in the other conditions. These findings are contrary to that of previous research showing that women exposed to images with warning labels showed lower levels of body dissatisfaction compared to women exposed to images without warning labels (Slater et al., 2012).

I hypothesized that participants in the digitally altered without a warning label condition would report lower levels of positive affect and participants in the neutral condition would report higher levels of positive affect. Although there was a significant difference between the conditions, my hypothesis was only partially supported. In support of my hypothesis, participants in the neutral image condition showed higher levels of positive affect compared to participants in the digitally altered with a warning label condition. Interestingly, participants in the digitally altered without a warning label condition did not report lower levels of positive affect as expected. It was actually those in the digitally altered with a warning label that showed the lowest level of positive affect.

For negative mood, I predicted that participants in the digitally altered without a warning label condition would report higher levels of negative affect, and participants in the neutral condition would report lower levels of negative affect compared to the other conditions. The results did not support my hypothesis. There were no significant differences between the four conditions on measures of negative mood. Negative affect scores across all four image conditions were virtually identical.

Current findings are contrary to prior research that has found that participants who viewed the thin-ideal images reported greater levels of negative mood when compared to those in the neutral condition (Harper & Tiggemann, 2008).

When measuring self-esteem, I predicted that participants in the digitally altered without a warning label condition would report lower levels of self-esteem, and participants in the neutral condition would report higher levels of self-esteem. The results did not support this hypothesis. No significant differences were found across the four conditions on measures of self-esteem. The present findings do not support findings from previous studies demonstrating that self-esteem is a variable that is affected by media pressure (Thompson et al., 1999). Previous studies have also shown that women who viewed thin idealized images reported lower self-esteem levels after being exposed to the thin-ideal images compared to women who viewed neutral images (Hawkins et al., 2004). These previous findings provide evidence that exposure to thin-ideal images is linked with feelings of low self-esteem in women.

Additionally, I predicted that participants in the neutral condition would report lower levels of social comparison and participants in the digitally altered without a warning label condition would report higher levels of social comparison. Findings showed there were no significant differences between the four conditions on measures of social comparison, thus not supporting hypothesis. Contrary to the current findings, previous research has found that women exposed to images with warning labels perceived images as less realistic and not relevant to compare themselves with or aspire to, and that warning labels serve to remind women that the models in the

fashion spreads are not worth comparing themselves to because they are not realistic, nor attainable ideals for the average weight woman (Slater et al., 2012). Previous research has also demonstrated that female college students do indeed engage in high levels of social comparison when viewing media images portraying the ideal body image (Richins, 1995) which is contrary to current findings.

Overall, it was found that the participants who viewed thin idealized images did not show greater negative effects when compared to women who viewed unaltered or neutral images in regard to self-esteem, mood, social comparison, and body dissatisfaction. As previous research has suggested, exposure to thin-idealized images has a negative impact on women's body image. An explanation for the discrepancy in findings between current and past research could be due to previous findings consisting of a larger sample, whereas my study consisted of a smaller sample. Additionally, participants in most previous studies were young adolescents whereas my study consisted of college-aged students. It may be that younger adolescent girls are more susceptible to the negative effects of viewing the "ideal body image." Furthermore, the present study utilized images of celebrities for all conditions except the neutral condition. It may be that women are less prone to social comparisons when viewing images of celebrities than they are when viewing unknown models. The neutral images in the present study might not have been viewed as neutral by participants. These images were all images of make-up/beauty products which might have reminded participants of their own appearance. This could

have negatively impacted self-esteem, mood, and social comparison, and body dissatisfaction.

Additionally, findings revealed that the use of warning labels did not have an effect on women's perceptions of media images. As evidenced by current findings, participants who viewed digitally altered images with a warning label showed similar responses to those who viewed digitally altered images without a warning label. These findings are contrary to previous research showing that labels served to ameliorate the usually obtained negative effects of exposure to thin ideal media images (Slater et al., 2012). The current findings also suggest that the warning label did not serve its purpose and was not effective in reducing the negative effects of exposure to thin ideal media images. An explanation for the current findings could be that participants were instructed to focus their attention on the images by completing a visual analogue scale while viewing the images. Participants were not expected nor given directions to focus their attention on the warning label which could have led participants to not attend to the warning label. Perhaps if participants had been instructed to attend to the warning labels, results would have supported my hypotheses.

Although attractiveness, sexiness, and fatness were not the variables examined to test my hypotheses, it was interesting to explore the effects that each condition had on ratings of these variables. Having participants rate the models' attractiveness, sexiness, and fatness ensured that participants were indeed attending to the images and served as a manipulation check. Findings showed that participants in the digitally

altered with a warning label condition rated models higher on attractiveness, higher on sexiness, and lower on fatness compared to participants in the unaltered condition. Although it wasn't significant, participants in the altered without a warning label condition tended to rate the models as more attractive, sexier, and less fat than did participants in the unaltered condition. These findings suggest that the digital manipulations did influence participants' impressions of the models. Exposure to thin-ideal images had an effect on women's perceptions of attractiveness, sexiness, and fatness. These findings are contrary to those of Fister and Smith (2004) who found that participants exposed to thin models and participants exposed to more realistic images (average weight models) did not differ in their ratings of how attractive they perceived and rated the models.

Although the current study did not focus on the relationship between BMI and the dependent variables, it was interesting to see the relationship between BMI and each DV. When looking at body dissatisfaction, there was a significant positive relationship between BMI and body dissatisfaction, indicating that people with a high BMI tend to report higher levels of body dissatisfaction. Current findings are consistent with previous findings supporting the idea that BMI is a predictor of body dissatisfaction and influences body dissatisfaction by increasing the disparity with ideal body shape (Stice & Whitenton, 2002). Given these findings, it is not surprising that BMI was significantly correlated with body dissatisfaction in the present study. Current findings also found a significant negative correlation between BMI and self-esteem, indicating that people with a high BMI tended to report lower levels of self-

esteem. Again, given previous findings that have shown that BMI is a predictor of self-esteem (Biro et al., 2006), it's not surprising that BMI was correlated with self-esteem in the present study. There were no significant correlations found between BMI and positive affect, BMI and negative affect, and BMI and social comparison. In sum, the current findings reinforce findings that BMI is a predictor of body dissatisfaction and self-esteem.

Limitations

One of the many limitations of my study was that due to the sample consisting of college-aged female students, results can only be generalized to female college students. Also, male students were not included in this study, so it is unknown whether media images portraying an ideal image would have an effect on men's body image. Additionally, there was also an age limitation (participants were college-age students) given the importance of body dissatisfaction in adolescents. Another limitation of my study was that participants were exposed to images for a short period of time (15 seconds per image), therefore effects of long term exposure are unknown. Also, because participants viewed images for a short period of time, effects could have possibly been short-lived. Additionally, the study was conducted online, meaning participants were able to complete the study on any device that connected to the internet. This may have had an indirect effect on participant's responses. For example, participants who completed the study on a laptop may have had a clearer and bigger view of the images, whereas participants who completed the study on a phone or tablet may have had a blurrier and smaller view of the images. Another

limitation of this study was, because participants were to focus on images of women representing the thin ideal portrayed by the media, they may have had an idea of what the study was about and responded in a socially desirable way. Furthermore, because I utilized pre-existing images found online that were both the altered and unaltered images, the image pool was limited. Additionally, the neutral images in this study might have reminded viewers of their own appearance and could have influenced scores on the outcome measures. Finally, because I utilized images of celebrities, this could have influenced participants' responses.

Recommendations for Future Research. Although not all research hypotheses were fully supported, this study generated some interesting information and provided support to the overall purpose of the study. Considering previous research and the current study focused on the short-term effects of viewing thin idealized media images, it would be interesting to examine the effects of long-term exposure to thin-idealized images. Additionally, my study focused on the effects of thin-idealized media images on women's body image and excluded men from the study. Considering past research has shown that men are also sensitive to media images of cultural norm's that represent the cultural ideal (Ogden & Mundray, 1996), future research could focus on the effects of ideal media images on men's body image. Furthermore, my study focused on the effects of viewing realistic images (unaltered images). Although there were no significant differences between media image conditions, previous research has found that exposure to realistic images lessens the risk of thinness/restricting expectancies (Fister & Smith, 2004).

Considering the limited research in this area, future research could focus on the effects of viewing average weight models vs. thin models. My study also aimed at examining the effects of warning labels on women's body image. Slater et al. (2012) findings provided the first evidence that the use of warning labels may help ameliorate some of the known negative effects of viewing media images that feature the thin ideal. Contrary to these findings, current findings for my study showed there were no significant differences between conditions, indicating that the use of warning labels did not serve their purpose of ameliorating the known negative effects of exposure to thin-ideal images. Considering the limited research in this area, future research could focus on adding to this area of research by examining the inclusion of warning labels on media images. Additionally, my study did not instruct participants to focus their attention on the warning label, which may explain why there were no significant differences. Instead, participants were to focus their attention on the media image by rating the model's attractiveness, sexiness, and fatness. Future research could perhaps examine the effects of warning labels and have participants focus their attention on the warning label rather than the media image.

Additionally, it would be interesting to examine the economic consequences of business/advertisers using manipulated images and thin models vs. business/advertisers using unaltered images and more realistic body sizes to advertise their products. It seems that a popular brand store, American Eagle, has moved towards promoting more realistic body images for teens. In their latest campaign, American Eagle advertised their lingerie line, Aerie, using more realistic body types

showing the model's dimples, tattoos, and stretchmarks. While some companies may be taking a step forward in portraying a more realistic body image, Disney is taking a step back. Although Disney has aimed at creating more diverse characters, there continues to be a portrayal of the ideal body image emphasizing thinness by creating Disney characters with unrealistic body types. For example, an article on Huffington Post described the continuation of creating thin Disney characters. For example, the character from *Frozen*, Princess Ana, is seen to have eyeballs wider than her wrists. It seems that the ideal body image continues to be emphasized by the media one way or another. Keeping this in mind, future research should focus on business/advertising using thin models to advertise their products. Finally, my study consisted of female college-age students. Considering the prevalence of body dissatisfaction amongst adolescents, future research should explore the effects of media images with a younger population.

Implications . This study has emphasized the effects that the portrayal of idealized media image has on women's body image. Previous research has demonstrated that media images portraying the thin ideal have a negative impact on women's body image. Additionally, past research has shown that inclusion of warning labels serve to ameliorate some of the known negative effects of such images. Furthermore, previous studies have demonstrated the need for more average weight models to be portrayed in the media as well as digitally unaltered images that show models imperfections. Findings from the current study suggest that media images did not have a negative impact on women's body images as evidenced by prior research.

Interestingly, while research has shown that the inclusion of warning labels does help ameliorate the negative effects of media images portraying the thin ideal, findings for the current study did not support previous research. Participants who viewed images with a warning label did not significantly differ from participants who viewed images without a warning label. A possible explanation for this is that participants were not instructed to attend to the warning label. There was no manipulation check to determine if participants were actually attending to what the label read. Finally, although the present study did not find any negative effects of viewing thin idealized images on self-esteem, body dissatisfaction, mood, and social comparison, future research is warranted given the potential importance of these issues.

REFERENCES

REFERENCES

Ata, R. N., Thompson, J., & Small, B. J. (2013). Effects of exposure to thin-ideal media images on body dissatisfaction: Testing the inclusion of a disclaimer versus warning label. *Body Image*, *10*, 472-480. doi:10.1016/j.bodyim.2013.04.0

Baghurst, T., Hollander, D. B., Nardella, B., & Haff, G. G. (2006). Change in sociocultural ideal male physique: An examination of past and present action figures. *Body Image*, 3, 87–91.

Bennett, J. (2008). Picture Perfect. *Newsweek*. Retrieved July 24, 2014, from http://www.newsweek.com/2008/05/01/picture-perfect.html

Bissell, K., & Rask, A. (2010). Real women on real beauty: Self-discrepancy, internalisation of the thin ideal, and perceptions of attractiveness and thinness in Dove's Campaign for Real Beauty. *International Journal of Advertising: The Quarterly Review of Marketing Communications*, *29*(4), 643-668. doi:10.2501/s0265048710201385

Borresen, R., & Rosenvinge, J. H. (2003). Body dissatisfaction and dieting in 4,952 Norwegian children aged 11 to 15 years: Less evidence for gender and age differences. *Eating and Weight Disorders 8*, 238-241. doi:10.1007/BF03325020

Brennan, N. & Kevenew, J. (1985). Anthropometry and body image in a selected sample of adolescent girls. *Irish Journal of Medical Science*, *154,* 220-227.

Carroll, D., Gleeson, C., Ribsby, B. & Dugdale, A. E. (1986). Body build and the desire for slenderness in young people. *Australian Paediatric Journal*, *22*, 121-125. doi: 10.1111/j.1440-1754.1986.tb00202.x

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*, 220–239. doi:10.1521/jscp.2000.19.2.220

Cooper, P. J., Taylor, M. J., Cooper, Z, & Fairburn, C, G. (1987). The development and validation of the Body Shape Questionnaire. *International Journal of Eating Disorders, 6*, 485-494. doi: 10.1002/1098-108x(198707)6:4<485::AID-EAT2260060405>3.0.CO;2-O

Counts, C. R. & Adams, H. E. (1985). Body image in bulimic, dieting and normal females. *Journal of Psychopathology and Behavioural Assessment,* 7, 289-300. doi: 10.1007/BF00960759

Duffett, H. (2009). Jo Swinson: "Ban airbrushing in children's adverts." *Liberal Democrat Voice.* Retrieved from http://www.libdemvoice.org

Durkin, S. J., & Paxton, S. J. (2002). Predictors of vulnerability to reduced body image satisfaction and psychological wellbeing in response to exposure to idealized female media images in adolescent girls. *Journal of Psychosomatic Research, 53,* 995–1005. doi:10.1016/S0022-3999(02)00489-0

Erlanger, S. (2009,). Point, shoot, retouch and label? *The New York Times*. Retrieved from http://www.nytimes.com

Fallon, A.E. (1990). Culture in the mirror: Sociocultural determinants of body image. In T. F. Cash & T. Pruzinsky (Eds.), *Body images:* Development, deviance and change (pp. 80–109). New York: Guilford Press.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117–140. doi: 10.1177/001872675400700202

Fister, S. M., & Smith, G. T. (2004). Media effects on expectancies: Exposure to realistic female images as a protective factor. *Psychology of Addictive Behaviors*, *18*, 394-397. doi:10.1037/0893-164X.18.4.394

Fouts, G., & Burggraf, K. (1999). Television situation comedies: Female body images and verbal reinforcements. *Sex Roles, 40*, 473–481 doi: 10.1023/A:1018875711082

Fouts, G., & Burggraf, K. (2000). Television situation comedies: Female weight, male negative comments, and audience reactions. *Sex Roles, 42,* 925–932. doi: 10.1023/A:1007054618340

Fredrickson, B. L., & Roberts, T. (1997). Objectification Theory: toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, *21*, 173–206. doi:10.1111/j.1471-6402.1997.tb00108.x

Grabe, S., Ward, L. 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. doi:10.1037/0033-2909.134.3.460

Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders*, *31*, 1–16. doi: 10.1002/eat.10005

Grogan, S. (2008). Body image: understanding body dissatisfaction in men, women and children. (2nd ed.) New York: Routledge/Taylor & Francis Group

Halliwell, E., Easun, A., & Harcourt, D. (2011). Body dissatisfaction: Can a short media literacy message reduce negative media exposure effects amongst Adolescent girls?. *British Journal of Health Psychology*, *16*(2), 396-403. doi:10.1348/135910710X515714

Hargreaves, D. A., & Tiggemann, M. (2004). Idealized media images and adolescent body image: 'Comparing' boys and girls. *Body Image*, *1*, 351-361. doi:10.1016/j.bodyim.2004.10.002

Harper, B., & Tiggemann, M. (2008). The effect of thin ideal media images on women's self-objectification, mood, and body image. *Sex Roles*, *58*(9-10), 649-657. doi:10.1007/s11199-007-9379-x

Harrison, K., & Cantor, J. (1997). The relationship between media consumption and eating disorders. *Journal of Communication, 47,* 40–67. doi: 10.1111/j.1460-2466.1997.tb02692.x

Hawkins, N., Richards, P. S., Granley, H. M., & Stein, D. M. (2004). The Impact of Exposure to the thin-ideal media image on w 1omen. *Eating Disorders: The*

Journal of Treatment & Prevention, 12(1), 35-50. doi:10.1080/10640260490267751

Heinberg, L. J. (1996). Theories of body image disturbance: Perceptual, developmental and sociocultural factors. In J. K. Thompson (Ed.), *Body image, eating disorders and obesity: An integrative guide for assessment and treatment*.Washington, DC: American Psychological Association. doi:10.1037/10502-002

Herman, C. P. & Mack, D. (1975). Restrained and unrestrained eating. *Journal of Personality, 43*, 646-660. doi: 10.1111/j.1467-6494.1975.tb00727.x

Herman. C. P., & Polivy, J. A. (1984). A boundary model for the regulation of eating. In: *Eating and its Disorders.* (eds A. J. Stunkard and E. Stellar). New York: Raven Press, pp. 141-156.

Hobza, C., Walker, K.E., Yakushko, O., & Peugh, J. L. (2007) What about men? Social comparison and the effects of media images on body and self-esteem. *Psychology of Men and Masculinity*, *8*(3), 161-172. doi:10.1037/1524-9220.8.3.161

Irving, L. M. (1990). Mirror images: Effects of the standard of beauty on the self- and body-esteem of women exhibiting varying levels of bulimic symptoms. *Journal of Social and Clinical Psychology*, 9, 230–242.

Johnson, P. J., McCreary, D. R., & Mills, J. S. (2007). Effects of exposure to objectified male and female media images on men's psychological well-being.

Psychology of Men & Masculinity, *8*(2), 95-102. doi:10.1037/1524-9220.8.2.95

Kouri, E. M., Pope, H.G. Jr., Katz, D. L., & Olivia, P. (1995). Fat-free mass index in users and nonusers of anabolic androgenic steroids. *Clinical Journal of Sports Medicine, 5,* 223-228.

Levine, M. P., & Piran, N. (2004). The role of body image in prevention of eating disorders. *Body Image: An International Journal of Research*, *1*, 57–70. doi:10.1016/S1740-1445(03)00006-8

Levine, M. P., & Smolak, L. (2002). Body image development in adolescence. In T. F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp. 74–82). New York: Guilford Press.

Leit, R. A., Gray, J. J., & Pope, H. r. (2002). The media's representation of the ideal male body: A cause for muscle dysmorphia?. *International Journal of Eating Disorders*, *31*, 334-338. doi:10.1002/eat.10019

Malkin, A. R., Wornian, K., & Chrisler, J. C. (1999). Women and weight: Gendered messages on magazine covers. *Sex Roles, 40*, 647–655. doi:10.1023/A:1018848332464

Martin, M. C., & Kennedy, P. F. (1993). Advertising and social comparison: Consequences for female preadolescents and adolescents. *Psychology and Marketing, 10,* 513–530. doi:10.1002/mar.4220100605

Mazzeo, S. E., Trace, S. E., Mitchell, K. S., & Gow, R. (2007). Effects of a reality TV cosmetic surgery makeover program on eating disordered attitudes and behaviors. *Eating Behaviors*, *8*, 390-397. doi:10.1016/j.eatbeh.2006.11.016.

McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health, 48,* 297–304. doi:10.1080/07448480009596271

Metzmacher, D. (2008). 70 beauty-retouching photoshop tutorials. *Smashing Magazine* Retrieved February 10, 2011, from http://www.smashingmagazine.com/2008/07/15/70-beauty-retouching-photoshop-tutorials/

National Advisory Group on Body Image. (2009). *A proposed national strategy on body image*. Retrieved February 1, 2011, from http://www.apo.org.au/node/19505.

National Eating Disorders Association - http://www.nationaleatingdisorders.org/

Neighbors, L. A., & Sobal, J. (2007). Prevalence and magnitude of body weight and shape dissatisfaction among university students. Eating Behaviors, *8*, 429–439. doi:10.1016/j.eatbeh.2007.03.003

Ogden, J. (1992). Fat Chance! The Myth of Dieting Explained. U.K./U.S.A/Canada: Routledge.

Ogden, J., & Mundray, K. (1996). The effect of the media on body satisfaction: The role of gender and size. *European Eating Disorders Review*, *4*, 171-182. doi:10.1002/(SICI)1099-0968

Ogden, J. & Wardle, J. (1991). Cognitive and emotional responses to food**.** *International Journal of Eating Disorders, 10*, 297-311. doi:10.1002/1098-108X(199105)10:3<297::AID-EAT2260100306>3.0.CO;2-D

Olivardia, R. (2002). Body image and muscularity. In T. F. Cash &T. Pruzinsky (Eds.), Body image: A handbook of theory, research, and clinical practice (pp. 210–218). New York: Guilford Press.

Olivardia, R., Pope, H. G. Jr., & Hudson, J. I. (2002). Muscle dysmorphia in male weightlifters: A case-control study. *American Journal of Psychiatry, 157*, 1291-1296. doi: 10.1176/appi.ajp.157.8.1291

Pope, H.G. Jr., Gruber, A.J., Mangweith, B., deCol, C., Jouvent, R., & Hudson, J.I. (2002). Body image perception among men in three countries. *American Journal of Psychiatry, 157*, 1297-1301. doi: 10.1176/appi.ajp.157.8.1297

Pope, H. G., Olivardia, R., Gruber, A., & Borowiecki, J. (1999). Evolving ideals of male body image as seen through action toys. International Journal of Eating Disorders, 26, 65–72.

Pope, H.G. Jr., Phillips, K.A., & Olivardia, R. (2000). The Adonis Complex: The secret crisis of male body obsession. New York: Free Press.

Posavac, H. D., Posavac, S. S., & Weigel, R. G. (2001). Reducing the impact of media images on women at risk for body image disturbance: Three targeted interventions. *Journal of Social and Clinical Psychology*, *20*(3), 324–340. doi:10.1521/jscp.20.3.324.22308

Presnell, K., Bearman, S. K., & Stice, E. (2004). Risk factors for body dissatisfaction in adolescent boys and girls: A prospective study. *International Journal of Eating Disorders*, *36*, 389–401. doi:10.1002/eat.20045

Richins, M.L. (1991). Social comparison and the idealized images of advertising. *Journal of Consumer Research, 18*, 71–83. doi:10.1086/209242

Richins, M. L. (1995). Social comparison, advertising, and consumer discontent. *The American Behavioral Scientist*, 38, 593–607.

Rodin, J., Silberstein, L. R.,&Striegel-Moore, R. H. (1984).Women and weight: A normative discontent. In T. B. Sonderegger (Ed.), Psychology and gender: Nebraska symposium on motivation (pp. 267–307). Lincoln: University of Nebraska Press.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Sarwer, D., & Crerand, C. (2004). Body image and cosmetic medical treatments. *Body Image, 1*, 99−111. doi:10.1016/S1740-1445(03)00003-2

Sarwer, D. B., Cash, T. F., Magee, L.,Williams, E. F., Thompson, J. K., Roehrig, M., et al. (2005). Female college students and cosmetic surgery: An investigation of experiences, attitudes, and body image. *Plastic and Reconstructive Surgery, 115*(3), 931−938.

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*, 105-122. doi:10.1521/jscp.2012.31.2.105

Spettigue, W., & Henderson, K. A. (2004). Eating disorders and the role of the media. *The Canadian Child and Adolescent Psychiatry Review, 13*, 16-19.

Stice, E., Schupak-Neuberg, E., Shaw, H. E., & Stein, R. I. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. *Journal of Abnormal Psychology, 103,* 836–840. doi: 10.1037/0021-843X.103.4.836

Stice, E., & Whitenton, K. (2002). Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology*, *38*(5), 669-678. doi:10.1037/0012-1649.38.5.669

Suls, J., & Wheeler, L. (2000). *Handbook of social comparison: Theory and research*. Dordrecht, Netherlands: Kluwer Academic Publishers.

Thompson, J. K., Coovert, MD., Stormer, S. M.. (1999). Body Image, social comparison, and eating disturbances: A covariance structure modeling investigation. *International Journal of Eating Disorders*, 26 (*1)*, 43-51

Thompson, J., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington, DC, US: American Psychological Association. doi:10.1037/10312-000

Thompson, J.K., Heinberg, L., & Tantleff, S. (1991). The Physical Appearance Comparison Scale (PACS). The Behavior Therapist, *14*, 174.

Thompson, J. K. & Thompson, C. M. (1986). Body size distortion and self esteem in asymptomatic normal weight males and females. *International Journal of Eating Disorders,* 5, 1061-1068. doi:10.1002/1098-108X(198609)5:6<1061::AID-EAT2260050609>3.0.CO;2-C

Thompson, J. K., Van den Berg, P., Roehrig, M., Guarda, A. S., Heinberg, L. J. (2004) The Sociocultural attitudes towards appearance scale-3 (SATAQ-3): Development and validation. *International Journal of Eating Disorders*, *35*, 292-304. doi:10.1002/eat.10257

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,* 23–44. doi:10.1521/jscp.23.1.23.26991

Vander Wal, J. S. (2000). Predictors of body image dissatisfaction in elementary-age school girls. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9951131).

Want, S. C., Vickers, K., & Amos, J. (2009). The influence of television programs on appearance satisfaction: Making and mitigating social comparisons to "Friends." *Sex Roles*, *60*, 642-655. doi:10.1007/s11199-008-9563-7

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063-1070.

Wood, J.V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin, 106*, 231–248. doi:10.1037/0033-2909.106.2.231

Yamamiya, Y., Cash, T. F., Melnyk, S. E., Posavac, H. D., & Posavac, S. 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*(1), 74–80. doi:10.1016/j.bodyim.2004.11.001

APPENDICES

APPENDIX A

INFORMED CONSENT

1) This research study will examine how individuals perceive media images. If you agree to participate, you will be asked to view a total of 10 media images, then to complete a series of questionnaires regarding the images you viewed. You will also be asked to answer questions about yourself.

2) You are free to discontinue your participation at any time without penalty. You may also skip any survey questions that make you feel uncomfortable. Even if you withdraw from the study, you will receive any entitlements that have been promised to you in exchange for your participation, such as extra credit.

3) Participation in this research study does not guarantee any benefits to you. However, possible benefits include the fact that you may learn something about how research studies are conducted and you may learn something about this area of research (i.e., how individuals perceive media images.)

4) You will be given additional information about the study after your participation is complete.

5) If you agree to participate in the study, it will take about 30 minutes to complete the survey.

6) All data from this study will be kept from inappropriate disclosure and will be accessible only to the researchers and their faculty advisor. The researchers are not interested in anyone's individual responses, only the average responses of everyone in

the study.

7) The present research is designed to reduce the possibility of any negative experiences as a result of participation. Risks to participants are kept to a minimum. However, if your participation in this study causes you any concerns, anxiety, or distress, please contact the Student Counseling Center at (209) 667-3381 to make an appointment to discuss your concerns.

8) This research study is being conducted by Christina Avila. The research supervisor is Dr. Gary Williams, California State University, Stanislaus. If you have questions or concerns about your participation in this study, you may contact the researchers through Dr. Williams at (209) 667-3065.

9) You may obtain information about the outcome of the study at the end of the academic year by contacting Dr. Williams.

10) If you have any questions about your rights as a research participant, you may contact the Campus Compliance Officer of California State University Stanislaus at IRBadmin@csustan.edu.

11) You will be given the opportunity to print a copy of the consent form for your own records.

12) By clicking below, you attest that you are 18 years old or older.

13) By clicking below, you are indicating that you have freely consented to participate in this research study.

APPENDIX B

DIGITALLY ALTERED IMAGES WITH WARNING LABEL

"This photo has been manipulated to change the model's physical appearance."

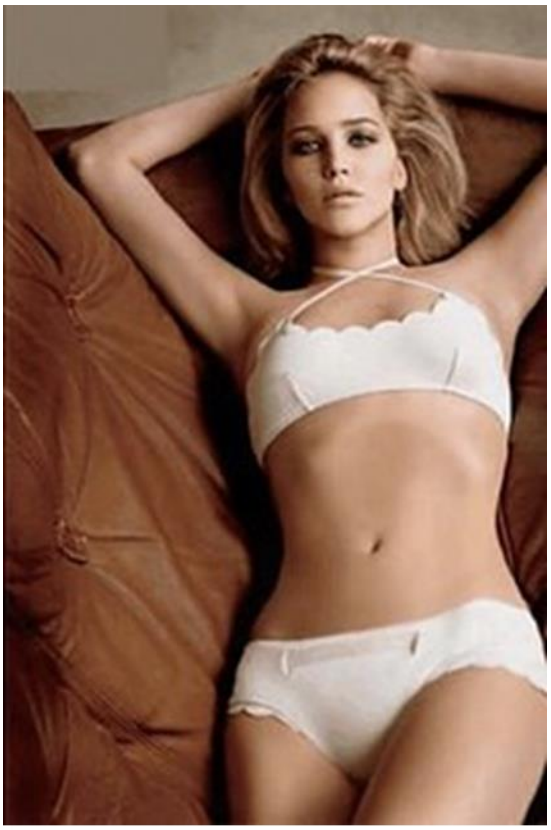
"This photo has been manipulated to change the model's physical appearance."

"This photo has been manipulated to change the model's physical appearance."

"This photo has been manipulated to change the model's physical appearance."

“This photo has been manipulated to change the model's physical appearance.”

"This photo has been manipulated to change the model's physical appearance."



“This photo has been manipulated to change the model's physical appearance.”

“This photo has been manipulated to change the model's physical appearance.”

"This photo has been manipulated to change the model's physical appearance."

“This photo has been manipulated to change the model's physical appearance.”

APPENDIX C

DIGITALLY ALTERED IMAGES WITHOUT A WARNING LABEL

(Same as Appendix B, but without a warning label)

APPENDIX D

UNALTERED IMAGES WITHOUT A WARNING LABEL

APPENDIX E

NEUTRAL IMAGES


MAYBELLINE
NEW YORK


sisley
PARIS


KEVYN AUCOIN


bellapierre
bellapierre
bellapierre
bellapierre

APPENDIX F

VISUAL ANALOGUE SCALE

Not at all attractive	——————————— — **<-- 10 cm. -->**	**Very Attractive**

Not at all Sexy	——————————— — <-- 10 cm. -->	**Very Sexy**

Not at all fat	——————————— — <-- 10 cm. -->	**Very fat**

APPENDIX G

VISUAL ANALOGUE SCALE

1) How often do you utilize this piece of makeup?

Not at all	——————————— — **<-- 10 cm. -->**	**Very Often**

2) How often do you think women in general utilize this piece of makeup?

Not at all	——————————— — **<-- 10 cm. -->**	**Very Often**

3) Using this piece of makeup makes women feel better about themselves.

Strongly Disagree	——————————— — **<-- 10 cm. -->**	**Strongly Agree**

APPENDIX H

DEMOGRAPHIC QUESTIONNAIRE

1) What is your age (in years)? _____

2) What is your sex?

a. Male

b. Female

c. Other

3) What is your class standing?

a. Freshman

b. Sophomore

c. Junior

d. Senior

e. Graduate student

f. Other

4) What is your race/ethnicity?

a. Caucasian

b. Hispanic

c. Asian/Pacific Islander

d. African American

e. Other

5) Do you have a known history of eating disorder (s)?

a. Yes

b. No

6) What is your estimated height? _____

7) What is your estimated weight? _____

APPENDIX I

DEFRIEF FORM

Thank you for participating in this study. I am interested in studying whether short-term exposure to media images portraying an ideal body that emphasize the "thin ideal" have an effect on women's body satisfaction, mood, self-esteem, and social comparison. This study also examines if media images with warning labels that inform the readers of the unrealistic nature of the images have positive effects on women's body image or at least not have any negative effects. Participants were assigned to view either digitally altered images with a warning label, digitally altered images without a warning label, unaltered images without a warning label, or neutral images. Prior research has shown that media images portraying the "thin ideal" have a negative impact on women's body image. Also, research has shown that the inclusion of "warning labels" helps ameliorate some of the known negative effects of images portraying the "thin ideal." I expect to find results that are similar to previous research.

All the information I collected in this study will be kept safe from inappropriate disclosure, and there will be no way of identifying your responses in the data archive. I am not interested in anyone's individual responses; rather, I want to look at the general patterns that emerge when all of the participants' responses are put together. We ask that you do not discuss the nature of the study with others who may later participate in it, as this could affect the validity of my research conclusions.

If you have any questions about the study or would like to learn about the results of the study, you may contact me, Christina Avila, or my research supervisor, Dr. Gary Williams, at (209) 667-3065. If you have questions about your rights as a research participant, you may contact the Campus Compliance Officer of CSU Stanislaus at IRBadmin@csustan.edu. If participation in the study caused you any concern, anxiety, or distress, you may contact the Student Counseling Center at (209) 667-3381.

If you would like to learn more about this research topic, I suggest the following reference:

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*, 105-122. doi:10.1521/jscp.2012.31.2.105

APPENDIX J

BODY SHAPE QUESTIONNAIRE-8C

We should like to know how you have been feeling about your appearance over the PAST FOUR WEEKS. Please read each question and circle the appropriate number to the right. Please answer all the questions. OVER THE PAST FOUR WEEKS:

Never = 1, Rarely = 2, Sometimes = 3, Often = 4, Very often = 5, Always = 6

1. Have you been afraid that you might become fat (or fatter)?..... 1 2 3 4 5 6
2. Has feeling full (e.g., after eating a large meal) made you feel fat?..... 1 2 3 4 5 6
3. Has thinking about your shape interfered with your ability to concentrate (e.g., while watching television, reading, listening to conversations)?..... 1 2 3 4 5 6
4. Have you imagined cutting off fleshy areas of your body?..... 1 2 3 4 5 6
5. Have you felt excessively large and rounded?..... 1 2 3 4 5 6
6. Have you thought that you are in the shape you are because you lack self-control?..... 1 2 3 4 5 6
7. Has seeing your reflection (e.g., in a mirror or shop window) made you feel bad about your shape?..... 1 2 3 4 5 6
8. Have you been particularly self-conscious about your shape when in the company of other people?..... 1 2 3 4 5 6

APPENDIX K

THE POSITIVE AND NEGATIVE AFFECT SCHEDULE

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 or indicate the extent you have felt this way over the past week.

1= Very Slightly or Not at All

2= A Little

3=Moderately

4= Quite a Bit

5=Extremely

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

APPENDIX L

ROSENBERG SELF-ESTEEM SCALE

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

Strongly Agree, Agree, Disagree, Strongly Disagree

2. At times I think I am no good at all.

Strongly Agree, Agree, Disagree, Strongly Disagree

3. I feel that I have a number of good qualities.

Strongly Agree, Agree, Disagree, Strongly Disagree

4. I am able to do things as well as most other people.

Strongly Agree, Agree, Disagree, Strongly Disagree

5. I feel I do not have much to be proud of.

Strongly Agree, Agree, Disagree Strongly, Disagree

6. I certainly feel useless at times.

Strongly Agree, Agree, Disagree, Strongly Disagree

7. I feel that I'm a person of worth, at least on an equal plane with others.

Strongly Agree, Agree, Disagree, Strongly Disagree

8. I wish I could have more respect for myself.

Strongly Agree, Agree, Disagree Strongly, Disagree

9. All in all, I am inclined to feel that I am a failure.

Strongly, Agree, Agree Disagree, Strongly Disagree

10. I take a positive attitude toward myself.

Strongly Agree, Agree, Disagree, Strongly Disagree

APPENDIX M

THE PHYSICAL APPEARANCE COMPARISON SCALE (PACS)

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

Never	Seldom	Sometimes	Often	Always
1	2	3	4	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