Roosevelt University

# Effectiveness of Warning Labels on Fashion Advertisements in Combating Body Dissatisfaction Among Women of Color

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Abstract

Media outlets perpetuate an ultra-thin feminine ideal which has been linked to body dissatisfaction among women (Lew, Mann, Myers, Taylor, & Bower, 2007). The present study focused on the inclusion of warning labels, similar to those in cigarette ads, on advertisements. Previous research indicates that these labels might have a protective factor for women's body satisfaction, but results are inconsistent (Slater, Tiggemann, Firth, & Hawkins, 2012; Tiggemann, Slater, Bury, Hawkins, & Firth, 2013). The purpose of this study was to resolve inconsistencies from past research and extend the findings to Women of Color (WOC). Participants of this study included 161 female college students at a Midwestern university. Results indicated that warning labels may serve to decrease body dissatisfaction within both White Women and WOC. Implications for practice were also discussed.

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## Introduction

The internalization of the ultra-thin, unrealistic ideal has been linked to body dissatisfaction among women (Lew, Mann, Myers, Taylor, & Bower, 2007). Researchers have examined the factors that make this ideal implausible, including cosmetic surgery, genetics, makeup, and the use of photo manipulation services (Posavac, Posavac, & Weigel, 2001). Nonetheless, this ideal is utilized by nearly every media outlet around the globe, such as magazines, television, music, books, film, and the internet. It is projected to consumers through the use of fashion and commercial print models in advertisements. In the United States, models are used on game shows, in music videos, in nightclub promotions, in magazines, and on billboards. When models are used to illustrate the ultra-thin ideal, it becomes easy to transmit messages or suggestions for beauty and bodily appearance to consumers.

Seventy-eight percent of magazine covers contain a message regarding bodily appearance (Malkin, Wornian, & Chrisler, 1999). This increases the chances of regular exposure to the ultra-thin ideal and appearance related messages. Unfortunately, the impacts of media consumption are long-term, pervasive and cumulative (Hargreaves & Tiggemann, 2003). In turn, this leads many to consider what can be done to protect women from media influences or moderate the effects of the ultra-thin ideal. The present study focused on the pairing of ultra-thin media images with warning labels that explain the nature of the photo manipulation services that are frequently used. Previous research indicates that these labels, similar to those on cigarettes, might serve as a protective factor for women's body

satisfaction (Slater, Tiggemann, Firth, & Hawkins, 2012). A follow-up article, however, challenged these findings, and the researchers have suggested that further study is needed to make a definitive decision about the effectiveness of warning labels in lowering women's body dissatisfaction (Tiggemann, Slater, Bury, Hawkins, & Firth, 2013).

Despite these conflicting results, researchers have proposed that educating women about digital editing services such as Photoshop might influence their opinion about the ultra-thin ideal, the media and themselves. This in turn could increase women's self-esteem and body satisfaction. In particular, I was interested in investigating the efficacy of warning labels in a racially diverse population. Researchers have examined the cross-cultural impact of media exposure on women's body dissatisfaction; however, results have been mixed (Caldwell, Brownell, & Wilfley, 1997; Gil-Kashiwabara, 2002; Grabe & Hyde, 2006). Consequently, this study aimed to investigate the following question: Does the effectiveness of warning labels on thin-ideal images apply to both White women and Women of Color?

In this literature review, I introduce sociocultural theory and the variables that influence current beauty ideals, including the media. Next, I describe the history and development of the media's impact on consumer attitudes and behaviors. Third, I review literature regarding the ultra-thin ideal projected by the media. Then, I highlight the possible reasons women internalize the ultra-thin ideal, including social comparison theory. I define and discuss the construct of body dissatisfaction and the research that links it to media consumption. I identify strategies that have been proposed to counteract the ultra-thin ideal. Finally, I discuss the impact of race mediating these two variables.

**Sociocultural theory & the Media**

According to Sociocultural theory, a number of factors influence current beauty ideals such as family, culture, religion, zeitgeist, gender, peer evaluation and the mass media (Thompson, Van den Berg, Roehrig, Guarda & Heinberg, 2004). While I acknowledge the importance of all these factors, for purposes of this review, I examined the impact of exposure to various media outlets on women. This is of particular interest as consumers' media exposure increases, given the number of households with televisions, access to the internet, smart phones, etc.

Many of these media outlets, including magazines, expose consumers to the ultra-thin ideal. Malkin, Wornian, and Chrisler (1999) performed a content analysis on magazine covers in order to investigate the prevalence of gendered messages based on bodily appearance. To this end, researchers analyzed 21 men's and women's magazine covers and placements. They found that over 75% of women's magazine covers contained a message regarding bodily appearance versus none of the men's covers (Malkin et al., 1999). Of this, 25% included discordant/conflicting messages of both weight loss and dieting. For example, 61% of contradictory messages were located next to each other on the magazine cover, with one story about food and indulgence and another geared towards toning, trimming, or losing fat (Malkin et al., 1999). Moreover, messages such as, "Ways to make your life better," were placed next to, "Lose 10 pounds" (Malkin et al., 1999). Consequently, researchers concluded that the specific placement and layout of messages on magazine covers could negatively impact consumers by suggesting that altering one's appearance could improve her life (Malkin et al., 1999). These findings highlight the media's emphasis on women's thinness, beauty and happiness.

After establishing that women's magazine covers were geared towards appearance, Aubrey (2010) sought to determine how health-related messages vary from appearance messages. She was interested in differentiating between message frames that tell women they can do something to *look* better versus *feel* better. Similar to Malkin et al. (1999), Aubrey conducted a content analysis, revealing that both types (appearance and health) of message frames are prevalent in the United States. In the second part of the study, she found that body shame and motivation to exercise increased in women who were exposed to appearance-related magazine articles but not in women exposed to health-related articles (Aubrey, 2010). In addition, women reporting greater exposure to appearance-related magazine articles indicated increased body shame and motivation to exercise compared to women reporting decreased exposure to appearance-related magazines.

These studies reveal the complex ways that magazine advertising influences consumers and their self-perceptions. Moreover, the market for magazine consumption is expansive. For instance, one popular magazine, *In Style*, sells approximately 550,000 copies per month (Lulofs, 2012). Consequently, chances are high that these consumers are viewing the ultra-thin ideal in this and many other fashion magazines. Moreover, many magazines are now available on the internet, including *Cosmopolitan*, which currently has 185,643 online subscribers (Lulofs, 2012). This has resulted in easy access to the media and the ultra-thin ideal. Unfortunately, increased magazine consumption also involves exposure to increasingly thin product campaign models, which perpetuates the ultra-thin ideal for beauty (Silverstein, Perdue, Peterson, Vogel, & Fantini, 1986).

**Ultra-thin ideal**

Since the late 1950s, the standard of beauty for women has changed, becoming less curvaceous than in the past and less representative of real women (Silverstein et al., 1986). In fact, researchers have highlighted a gradual decrease in the expected weight and body measurements of females in the media, starting in 1959 (Wiseman, Gray, Mosimann, & Ahrens, 1992). More importantly, the current thin ideal permeating throughout all types of media is being overrepresented and regarded in a positive light (Fouts & Burggraf, 1999; Silverstein et al., 1986). This has led to an ever-increasing and unrealistic discrepancy between the media's ideals for women and reality (Slater et al., 2012). As models become thinner, women in the general population cannot keep up with this standard. This is especially the case when images of models are retouched or digitally altered in order to correct and enhance. As a result, it becomes more difficult for everyday women to reach this ideal.

Slater et al. (2012) examined the many ways thin-ideal images are unrealistic. For example, models work with personal trainers to maintain a specific body image and make-up artists to keep a fresh face. Photographs of models get airbrushed to reduce the appearance of blemishes and wrinkles (Slater et al., 2012). Further, lighting and backgrounds of advertisements are adjusted in order to promote a product and make the model more appealing (Posavac et al., 2001). Finally, companies use photo-imaging/manipulation services to digitally alter and enhance photos and advertisements (Posavac et al., 2001). One popular set of software, Adobe Photoshop, has editing tools specifically for altering photographs. One such tool, called *transform*, allows an individual to change the shape and size of an object. Another, the *healing brush*, samples a good area of skin and merges it over

a bad area to remove blemishes and marks. The *paint brush* tool applies color to a specific area, and the *liquefy* tool serves to sculpt an image like clay (Adobe Creative Suite 6.0).

Unfortunately, women frequently internalize the unrealistic, ultra-thin ideal (Groesz, Levine, & Murnen, 2002). This occurs when women believe that the media is an important source to consult in gauging what is beautiful, successful, and appropriate (Thompson et al., 2004). In response, women alter their expectations, attitudes, and beliefs about beauty according to what they see in the media (e.g. through magazines, television, and movies). In addition, some women carry an external locus of control, where they look outside of themselves to determine what is beautiful (Martin & Xavier, 2010).

Ahern, Bennett, and Hetherington (2008) found that women who made positive implicit associations for underweight fashion models reported an increased drive for thinness. According to the authors, implicit associations involve a person's rapid, automatic associations and judgments between mental representations of items, things, or ideas (Ahern et al., 2008). In this study, some women automatically associated the word "positive" with images of "underweight" fashion models, selected as those having a BMI under 18.5 (Ahern et al., 2008). These women also reported a greater desire to be thin than women who did not make this association. This suggests that women who associate thinness with positivity are looking outside of themselves to determine what is beautiful.

The research of Ahern and colleagues (2008) also relates to the concept of self-objectification, which occurs when women describe themselves according to external (e.g. physical) rather than internal (e.g. feelings) characteristics (Aubrey, 2010). Self objectification concerns the importance of appearance and represents how individuals look at themselves through someone else's eyes. In other words, to what extent do we value our

appearance more from a third party's perspective, for example, through observable attributes such as attractiveness, instead of from our own perspective and through non-observable traits such as personality (Fredrickson & Roberts, 1997). These tendencies may lead women to compare and judge themselves based on the unrealistic standards of beauty that society establishes.

**Social Comparison Theory**

People have a natural tendency to compare themselves to one another. One type of social comparison occurs when an individual looks to someone else in order to gauge his or her own abilities, characteristics, or worth. Upward social comparisons involve comparisons to individuals who are deemed to be better than us on some dimension (Datta & Kulik, 2012). Social comparison theory is frequently studied in relation to body image and disordered eating behaviors, particularly among social psychologists (Glauert, Rhodes, Byrne, Fink, & Grammer, 2009; Myers & Crowther, 2009). For many girls and women, the ultra-thin images in the media represent targets or points for upward social comparison.

The question then becomes, why do women engage in upward social comparisons? For one, research has demonstrated that women associate the thin ideal with positive life success (Evans, 2003). Participants in Evans' (2003) study viewed an ultra-thin image with either a positive or negative success message. Those who were told that thin women are happiest and experience the highest life-satisfaction reported feeling less optimistic about the future and less satisfied with their own bodies (Evans, 2003). On the other hand, women given stereotype disconfirming data about the thin ideal model- that the model was unhappy- reported more positive moods and self esteem (Evans, 2003). In turn, researchers concluded

that the assumption that thin women are happiest and most satisfied might be driving women's upward social comparisons.

Bessenoff (2006) as well as Bissell and Rask (2010) found that women who engaged in social comparisons were likely to have a greater discrepancy between their actual and ideal body image, regardless of the size of the model depicted. This means that women who evaluate their own beauty based on others are likely to have a larger discrepancy between how they would like to look and reality. This speaks to the power of monitoring one's appearance and to the broader social comparison theory. To this end, Tylka and Sabik's (2010) research uncovered a connection between body surveillance (self-monitoring), social comparison and self-objectification. Specifically, women who are constantly monitoring their own physical appearance are more likely to be aware of others' appearance, and consequently are more likely to make comparisons to others. These comparisons and ruminations then lead women to describe themselves according to external standards through the process of self-objectification.

Social comparisons and internalization of the ultra-thin ideal have been linked to a number of consequences. Body comparisons to peers, for example, are associated with increased body image concerns and less self-confidence (Lin & Kulik, 2002). In addition, social comparisons impact self-esteem. As the size discrepancy between models and consumers increases, consumer self-esteem decreases (Smeesters, Mussweiler, & Mandel, 2009). As a result, as models become smaller and regular women's size remains consistent, an increase in the number of women making upward social comparisons should be observed. This should also lead to women experiencing lower self-esteem.

Dittmar, Halliwell, and Stirling (2009) analyzed this body image discrepancy and social comparison using a regression model. They concluded that exposure to thin models leads to weight-related self-discrepancy activation, increased body focused negative affect, and lowered self-esteem (Dittmar et al., 2009). This means that women engage in upward social comparisons after they are exposed to ultra-thin models. In turn, a woman quickly recognizes any potential discrepancy between herself and the model, which leads to negative feelings about her body and decreased self-esteem.

Social comparisons can be manipulated based on the way messages in advertisements are displayed (message frames) and what instructions are included for the consumer or participant. Tiggemann, Polivy, and Hargreaves (2009) created advertisements that included instructions meant to encourage participants to make upward social comparisons to models. In another experimental condition, women viewed advertisements that included fantasy instructions, which were designed to prompt the participant to think about what her experience would be like as an ultra-thin model. It was determined that social comparison instructions attached to an ultra-thin image were associated with negative mood and body dissatisfaction, but fantasy instructions increased mood in women (Tiggemann & McGill, 2004; Tiggemann et al., 2009). In addition, intelligence comparison instruction sets were also negatively correlated with body dissatisfaction (Tiggemann & Polivy, 2010).

**Body Dissatisfaction**

Media exposure to the ultra-thin ideal has widespread implications for the physical and mental health of women. Specifically, there is extensive research investigating the link between exposure to this ideal and subsequent body image dissatisfaction. It is also known that body dissatisfaction is an important risk factor for eating disordered behaviors (Lew et

al., 2007). When examining the impact of the media on women's disordered eating, researchers cannot neglect the mediating impact of body dissatisfaction (Lew et al., 2007).

It is clear that the relationship between media exposure, ultra-thin ideals, social comparison, body dissatisfaction, and eating disordered behavior is a complex one. For purposes of the present research, one important question is whether exposure to the ultra-thin ideal differentially impacts women's body dissatisfaction. Correlational and experimental studies indicate that both acute and long-term exposure are associated with increased levels of body dissatisfaction among women (Grabe, Ward, & Hyde, 2008; Hargreaves & Tiggemann, 2003). Furthermore, researchers posited a cumulative hypothesis for negative body image development (Hargreaves & Tiggemann, 2003). This hypothesis suggests that single episodes of dissatisfaction, occurring periodically, can multiply to impact the development of future body image concerns and dissatisfaction.

One explanation of the cumulative body dissatisfaction hypothesis is that the women most impacted by ultra-thin exposure are those who report high levels of internalization of the ultra-thin ideal. These women are more likely to perceive their bodies as inferior after viewing advertisements featuring ultra-thin models than after viewing ones with average-sized models (Dittmar & Howard, 2004; Groesz et al., 2002). Interestingly, these results may not perfectly apply to in-vivo, or direct contact exposure to the ultra-thin ideal (Krones, Stice, Batres, & Orjada, 2005). In fact, in-vivo exposure has been linked to increased body dissatisfaction but not negative affect, internalization, perceived pressure, and self-esteem (Krones et al., 2005).

Not only do media exposure and internalization impact women's body dissatisfaction directly, they also influence how women perceive others through social expectations and

standards (Willinge, Touyz, & Charles, 2006). For example, researchers have demonstrated that media exposure can influence women's beliefs about men's expectations for them, which in turn is linked to body dissatisfaction and shape concerns (Thomsen, 2002). Similarly, women's expectations for other women become more distorted when they feel their own bodies are inadequate, and in response they use thinner ideals when evaluating others (Wedell, Santoyo, & Pettibone, 2005). In addition, women will judge other women to be thinner than they actually are, creating an inaccurate perception and ideal. Willinge, Touyz, and Charles (2006) hypothesized that it is not just media exposure that leads to body dissatisfaction, but also the attitudes and beliefs we have about people.

To this end, King, Touyz, and Charles (2000) examined how women's perceptions about themselves impacted their perceptions of famous women in the media. In their investigation, women were shown one accurate and six distorted images of a celebrity and they were told to select which one was real (King et al., 2000). Results indicated that women who initially reported high body shape concerns selected thinner, inaccurate versions of celebrities than those women without these concerns (King et al., 2000). These results speak to the power of social comparisons and the media in distorting women's ideas of beauty standards and reality. Moreover, it reveals the fact that as a woman's body dissatisfaction increases, her perceptions of normal appearance becomes thinner (Glauert et al., 2009).

The aforementioned research has illustrated the negative, complex, pervasive implications of media exposure and internalizing the ultra-thin ideal on body dissatisfaction and other eating disordered behaviors. As a consequence, researchers have attempted to find strategies that might counteract these effects.

**Current strategies to counteract the ultra-thin ideal**

It has been argued that advertisements without ultra-thin models would not be as effective in selling products and services (Halliwell & Dittmar, 2004). Research has illustrated, however, that using ultra-thin or more realistically sized models are comparably effective in selling products (Halliwell & Dittmar, 2004). Although there was no difference in the attractiveness ratings of the models used in any condition, or the effectiveness of the advertisement, the thin-ideal models led participants to experience increased rates of body-focused anxiety (Halliwell & Dittmar, 2004). Although viewing average size models may decrease the short-term pressure to lose weight, in the long term, women still report the desire to achieve the ultra-thin ideal (Martin & Xavier, 2010).

One way to combat the effects of the ultra-thin ideal on body dissatisfaction may be to include accurate weight information labels on advertisements (Veldhuis, Konjin, & Seidell, 2012). In their study, Veldhuis et al (2012) presented participants with full color, page-width advertisements that included specific weight information labels according to the body shape of the model. Participants viewed advertisements including models of three body shapes: extremely thin, thin, or normal. Each also depicted a weight information label describing a woman who is six kilo underweight, three kilo underweight, or of normal weight (Veldhuis et al., 2012). Participants exposed to advertisements including extremely thin models, who were falsely represented as being of normal weight experienced the highest level of body comparison and dissatisfaction. At the same time, females who viewed extremely thin models who were accurately represented as underweight reported less body comparison and dissatisfaction (Veldhuis et al., 2012).

Another technique used to thwart the negative effects of media exposure and the internalization of the ultra-thin ideal for women with high trait body dissatisfaction is comparison writing on non-appearance dimensions (Lew et al., 2007). In one study, participants were told to write down their experiences of viewing images and then asked to perform downward social comparisons to the models. Downward comparisons in this case involved considering the attributes, positive qualities, and traits that the participant has which the model depicted in the image does not. It was determined that having participants engage in downward comparisons diminished the negative impact the model normally would elicit (Lew et al., 2007).

Other studies have utilized specific and targeted interventions to interrupt the link between media exposure and subsequent body dissatisfaction. Posavac et al. (2001) sought to help women dissociate from the thin-ideal images in the media by educating them about the artificial nature of the images. In this study, participants watched a video of a psychologist speaking about the specific intervention topic, either artificial beauty, genetic realities, or a combination message. The artificial beauty intervention presented the argument that ultra-thin media ideals are inappropriate sources for comparison, due to the fact that nearly all images and advertisements are enhanced and artificial (Posavac et al., 2001). The genetic realities intervention explained that media images are inappropriate sources of comparison, because most women are not genetically created to be the size of the ultra-thin models (Posavac et al., 2001). The combination condition included both of the other intervention topics. Ultimately, all intervention conditions decreased the likelihood of social comparisons for women and body dissatisfaction, with the combination condition showing greatest effectiveness (Posavac et al., 2001).

A similar intervention involved the experimental presentation of a media literacy video by Dove's self-esteem fund (Halliwell, Easun, & Harcourt, 2011). The short film depicted a female model having her hair and make-up worked on by professional artists. Afterwards, her picture was taken and digitally enhanced / edited in fast speed. Halliwell et al. (2011) concluded that viewing this video immediately prior to thin-idea exposure protected young girls from experiencing high state body dissatisfaction and low state body esteem. This study and the previous one suggest that making people aware of the artificiality in media images mitigates the negative impact of these images on the audience.

In addition to the interventions already discussed, it has been suggested that utilizing warning labels (like those on cigarettes) may help diminish the effects of thin-ideal images on body dissatisfaction (Slater et al., 2012). One study involved the experimental presentation of a fashion advertisement with a generic warning label, a specific label, or no warning at all. The generic label read, "Warning, these images have been digitally altered." The specific warning labels added a phrase which was tailored to the nature of the specific photo manipulation, such as, "Warning: these images have been digitally altered to lengthen legs and trim inner thighs" (Slater et al., 2012, p. 111). Researchers determined that participants in both warning label conditions reported lower body dissatisfaction than those who viewed fashion advertisements without warning labels (Slater et al., 2012). Moreover, this effect was significant regardless of how much a woman internalized the ultra-thin ideal.

Besides the general limitations of methodology and theory, it is important to note the skewed samples of studies in this area. Of the studies highlighted in this review, most contained a relatively homogeneous sample of college-aged, Caucasian, middle-class, educated, women. At the same time, many researchers justify this convenience sample for

body image and media research since this is their target population. Nonetheless, the impact of these variables on Women of Color is somewhat unclear given their underrepresented status in research. Despite the fact that they are underrepresented, it is important to consider how media supported ideals influence Women of Color (WOC).

**Moderating factor of race**

It has been argued that the Western cultural ideal for beauty mainly applies to Caucasian women. Despite the fact that 85 million people in the United States self-identify as non-White, the media targets the White population and treats Whiteness as the norm (US Census, 2011). Research indicates that Caucasian females report more symptoms of eating pathology and body dissatisfaction than both African American and Hispanic women (Barry & Grilo, 2002). Since the ultra-thin beauty ideal is directed at Caucasian women, it may be the case that Women of Color are somehow protected from these negative effects (Grabe & Hyde, 2006; Jefferson & Stake, 2009). Research suggests that White women endorse thinner ideals than African Americans and report being overweight in comparison to the ideal, whereas African American women say that they are underweight (Perez & Joiner, 2002). This is a clear delineation of the impact of not only media exposure and the ultra-thin ideal, but also internalization of that ideal. Women of Color are exposed to the media and the thin ideal, but it is possible that they do not internalize and socially compare in the same manner as White women. In addition, the media does not portray many Women of Color as ideal figures or targets for social comparison (Jefferson & Stake, 2009).

Culturally speaking, Women of Color may have different beauty standards than what the media projects. For example, Latin and African-Americans often express a preference for women who are larger and more full-bodied than what is presumably desired by many

Caucasians (Gil-Kashiwabara, 2002; Greenberg & LaPorte, 1996). In addition, researchers have illustrated that viewing Black oriented television and programming focused on Black characters has been linked to healthier body attitudes; however, viewing mainstream television was unrelated (Schooler, Ward, Merriwether, & Caruthers, 2004). This could be because Black television does not emphasize the same beauty standard that mainstream television does. Moreover, it is possible that Black media outlets and Black culture in general do not stress the necessity for social approval of beauty and appearance that is done frequently in White culture. This may explain why Black women report caring less about the approval of others in relation to body image (Jefferson & Stake, 2009). Moreover, Women of Color more broadly conceived (i.e. anyone identifying as not-White) report less body surveillance, or self-monitoring related to appearance, which is implicated in body dissatisfaction (Greenwood & Cin, 2012). Similarly, studies have shown Hispanic women to be less fixated on the thin ideal, which might serve as a moderating factor in the association between media exposure and body dissatisfaction (Ferguson, Munoz, Contreras, & Velasquez, 2011).

In addition, the psychological and emotional effect of the ultra-thin ideal may be less pronounced for Women of Color due to their sense of racial and ethnic identity. If a woman's culture has a distinct, non-White standard of beauty and that woman feels connected to her culture, she may report a healthier body image (Schooler et al., 2004). In the same vein, there may be less familial pressure to conform to beauty standards in populations of Women of Color (Jefferson & Stake, 2009).

Despite the fact that researchers have determined some racial differences in body dissatisfaction based on exposure to the ultra-thin ideal, they are by no means irrefutable. A

meta-analysis by Grabe and Hyde (2006) reviewed nearly 100 studies regarding race, ethnicity and body dissatisfaction. Their goal was to differentially explore race and ethnicity and determine their importance in body dissatisfaction. Statistically, effect sizes and comparisons were small, which means that although there were racial differences in levels of body dissatisfaction, many were close to zero. This challenges the long-held belief that body image issues are problems that only White women experience (Grabe & Hyde, 2006). One study, for example, reported that Hispanic women communicate similar levels of body-esteem, body dissatisfaction, and overestimation of weight to Caucasian women (Miller et al., 2000).

Barry and Grilo (2002) reported similar findings within Hispanic and African American women, highlighting the fact that body image disturbances are not infrequent within these groups. Another study surmised that both African-American and White women reported body dissatisfaction and that similar factors were found to predict this variable in both groups (Wilfley et al., 1996). The lack of consensus has led researchers to comment that although White women may report increased levels of body dissatisfaction, women in both groups who expressed body dissatisfaction ultimately selected smaller body ideals for themselves (Baugh, Mullis, Mullis, Hicks, & Peterson, 2010). These studies highlight the multicultural or cross-racial impact of the internalization of the ultra-thin idea (Jefferson & Stake, 2009).

Overall, these studies suggest that differences in body dissatisfaction of White women and Women of Color might be less pronounced than previously believed (Grabe & Hyde, 2006). Discrepancies between perceived similarities to images and a desire to be like that image are cross-racial (Greenwood & Cin, 2012). Moreover, perceived weight discrepancies

(actual weight — ideal) are a significant factor in explaining body dissatisfaction in both African American and White females (Russell & Cox, 2003). In consequence, the current line of questioning seeks to uncover the severity, experience and manifestation of body dissatisfaction within Women of Color.

The present study focused on a prevention technique that sought to weaken the connection between exposure to the ultra-thin ideal and body dissatisfaction. Similar to Slater et al. (2012), this study paired advertisements including ultra-thin models with warning labels that emphasize the artificial nature of the advertisement. Moreover, I was interested in examining any difference in the effectiveness of this prevention technique between White women and African American women. In response, this study aimed in part to replicate the findings of Slater et al., however, was unique in its assessment of warning label success within a more diverse sample. Due to convenience sampling, I was unsure whether I would obtain a robust enough sample to directly compare experimental effects between White and African American participants. In response, I sought to examine the effectiveness of a warning label prevention technique among Women of Color, broadly conceived.

**Hypotheses**

Based on the literature review and theory, the following hypotheses were developed:

1. Fashion magazine images with warning labels would be perceived as less realistic than those without warnings.
2. Hypothesis two included the following:
   (a) Viewing an image with a warning label would lead to decreased body dissatisfaction among women.

(b) The effectiveness of warning labels on advertisements would be less pronounced for Women of Color.

3. Attitudes towards societal ideals would moderate these effects of warning labels on body dissatisfaction. Effects would be greater for women who score higher on attitudes towards the Western, ultra-thin ideal.
4. Racial identity would moderate the impact of the warning label on Women of Color's body dissatisfaction. Women of Color with strong racial/ethnic identities would be less impacted by warning labels in comparison to Women of Color who have weaker racial identities.

## Method

### Overview of study

This online study employed a 2x2 between subjects' experimental design, with two levels of the independent variable of warning label (yes or no) and two levels of the subject variable, the race of the participant (WOC or White). I examined internalization of the ultra-thin ideal and level of racial identity as potential moderators of the relation between warning labels and the dependent measures. The purpose of this study was to investigate the effectiveness of warning labels on fashion advertisements for White women and Women of Color (WOC).

### Participants

The 161 female participants were Roosevelt University students who ranged in age from 18 to over 55 years old. Nearly 86% identified as being under 36 years old. Participants were recruited through Roosevelt University's SONA system as well as through social sciences courses, and were eligible to receive extra credit in their courses for their

participation. Over half the women identified as being Caucasian, as illustrated in Table 1. In addition, 65.2% of participants were undergraduate students, 24.8% were at the graduate level, and the remaining 10% could not be identified. The majority of participants reported never having been married (71.6%). Most of the participants identified as straight, (91.0%) while 3.9% of participants identified as lesbian, 4.5% as bisexual and .6% as other (i.e. pansexual). Finally, participants' magazine preferences are illustrated in Table 2.

Table 1

*Participants Identified Race*

| Race | *n* | Percentage |
|---|---|---|
| African American | 27 | 16.8% |
| Latina/Hispanic | 18 | 11.2% |
| Caucasian | 92 | 57.1% |
| Asian | 11 | 6.8% |
| Native American | 1 | 0.6% |
| Pacific Islander | 1 | 0.6% |
| Other (e.g. biracial or multiracial) | 11 | 6.8% |
| Total | 161 | 100% |

Table 2

*Participants Magazine Preferences*
*Question: What types of magazines do you normally read? Check all that apply*

| Magazine Type | *n* | Percentage |
|---|---|---|
| Adult (FHM, Playboy, etc) | 5 | 3.1% |
| Auto | 4 | 2.5% |
| Fashion (Vogue, Elle, etc) | 84 | 52.2% |

Table 2

*Participants Magazine Preferences*
*Question: What types of magazines do you normally read? Check all that apply*

| Magazine Type | *n* | Percentage |
|---|---|---|
| Health & Fitness | 49 | 30.4% |
| Home Life & Cooking | 44 | 27.3% |
| Industry | 2 | 1.2% |
| Popular Culture & Gossip (Star, People, etc) | 56 | 34.8% |
| Science & Technology | 16 | 9.9% |
| Women's | 50 | 31.1% |
| Other | 18 | 11.2% |

**Materials**

Experimental manipulation: image type. All participants were shown six, full-page fashion advertisements from popular women's magazines. Four of the six fashion advertisements included different female fashion models who represent the ultra-thin American ideal. In these images at least ¾ of the models' bodies were visible in the fashion advertisement. In consideration of demand effects, two of the fashion advertisements administered did not include fashion models (Slater, et al., 2012).

All images were sourced from eleven popular women's fashion magazines in the United States including: Vogue, Cosmopolitan, Elle, Essence, Ebony, Mujer, and Black Style Report. Additionally, all images were taken from issues of the magazines published between 2010 and 2012. I conducted in person pilot testing to evaluate the level of attractiveness of each model in the fashion advertisements using a seven-point scale. This data was analyzed to ensure comparable levels of attractiveness for the groups of images selected for the study. In addition, I matched the race of the model in each fashion advertisement to the race of

participant. Therefore, Caucasian participants viewed Caucasian models, while Women of Color viewed stimuli including Women of Color (WOC). It should be noted that all WOC participants viewed the same set of stimuli regardless of their specific racial background. Moreover, the fashion images used in the WOC condition appeared to be African American. There were eight total advertisements including models (4 White and 4 WOC) and two advertisements without any models. The same two non-model advertisements were used for both participant groups.

In the experimental condition, a generic warning label read, "Warning: these images have been digitally altered," and was placed on the bottom right-hand corner of each fashion spread (Slater et al., 2012). All warning labels were written in size 10 Calibri font in black or white (for contrast).

**Measures**

**State Self-Esteem**. I assessed state self-esteem using the 20-item State Self-Esteem Scale (SSES; Heatherton & Polivy, 1991). An example item is "I feel satisfied with the way my body looks right now." Participants rate each statement based on how they current feel on a 5-point scale ranging from 1 = *not at all*, to 5 = *extremely*. This scale measures three types of self-esteem: performance, social, and appearance. Higher scores indicate more self-esteem. Cronbach's alpha for the SSES is .92 (Heatherton & Polivy, 1991).

**Body Dissatisfaction**. I used the Body Parts Satisfaction Scale (BPSS; Berscheid, Walster, & Bohrnstedt, 1973) to measure individuals' satisfaction with their bodies by focusing on specific body parts that are typically associated with dissatisfaction in women (e.g. size of abdomen and upper thighs). For each item, individuals rate their level of satisfaction on a 6-point Likert scale, from *extremely dissatisfied* (1) to *extremely satisfied*

(6). The BPSS consists of 15 total items, 14 about specific body parts and one item labeled "overall shape." Lower scores represent greater body dissatisfaction.

I also measured body dissatisfaction using the Contour Drawing Rating Scale (CDRS; Thompson & Gray, 1995) that measures body dysmorphic disorder and general body dissatisfaction. This scale illustrates any incongruence between the actual self and ideal self, as well as any discrepancies between how people view themselves and how they believe others view them. Thompson and Gray (1995) hypothesized that the CDRS also assesses societal influences on people. Participants viewed nine figures (ranging from 1 = *very thin* to 9 = *very overweight*) and selected which image best represents: (1) what they think they look like, (2) their ideal, (3) other women's ideal figures, and (4) how men see them. Body satisfaction scores range from -8 to +8 and are calculated by the discrepancy of their ideal minus their current looks. A difference of zero indicates satisfaction, negative scores illustrate dissatisfaction and the desire to lose weight, while positive scores demonstrate the wish to be heavier. Thompson and Gray (1995) conducted a Pearson product-moment correlation in order to determine the reliability of the scale (r = .78). In addition, concurrent validity was statistically significant, *r* =.71).

**Body Comparison**. The Body Comparison Scale (Fisher, Dunn, & Thompson, 2002; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999) has 25 items that measure how often an individual will compare specific body parts, overall shape, and muscle tone to others of the same sex. For example, participants rate how often they compare each of the following parts of their bodies to others: Lips, hair, and overall shape of lower body. It includes a Likert scale from *never* (1) to *always* (5). Higher score reflect more comparison. Tylka and Sabik (2010) reported an alpha of .85 for the body comparison scale.

**Perceived Realism**. Slater et al's (2012) questions about the perceived realism were used to assess the perceived realism of the advertisements. Participants rated their agreement with the following three statements on a seven-point scale ranging from (1) *strongly disagree* to (7) *strongly agree*: "The models in the fashion shoots were realistic"; "The models in the fashion shoots were attainable for the average woman"; "The models in the fashion shoots present a reasonable ideal for me." Responses are totaled and range from three to 21 with an internal reliability alpha of .80 (Slater et al., 2012).

**Internalization of the Thin Ideal**. The Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3; Thompson et al., 2004) is a measure of an individual's awareness, endorsement, and internalization of a societal appearance (thin) ideal. The measure has 30 items with three subscales including fourteen items measuring internalization, seven that assess conformity pressure, and nine evaluating information (the media as an important source of information). An example item is, "TV programs are an important source of information about fashion and being attractive." Each item is rated on a 5-point scale from *definitely disagree* (1) to *definitely agree* (5). Higher scores suggest greater attitudes towards appearance, internalization of the thin ideal, a stronger belief in the media being an important source of information, and greater pressure to ascribe to media's standards. Previous analyses have described the SATAQ-3 as having good internal reliability (a = .96) as well as convergent validity with assessments of eating disturbance and body image (Thompson et al., 2004).

**Self-Objectification.** The Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) measured self-objectification and includes 24 Likert rated items regarding three subscales: body shame, body surveillance, and body control beliefs. Each subscale

includes eight items. An example item from the body surveillance scale is "During the day, I think about how I look many times." Participants indicate to what extent they agree with each statement about their bodies, from (1) *strongly disagree*, to (7) *strongly agree* and NA if they've not experienced the particular statement. In scoring the OBCS, the higher the score, the more the person is experiencing body shame, body surveillance or body control. Researchers have found the internal consistencies of the scales to be moderate to high- between .72 and .89 (McKinley & Hyde, 1996).

**Ethnic Identity Scale**. To assess participants' ethnic identity, the Multigroup Ethnic Identity Measure- Revised (MEIM-R; Phinney & Ong, 2007) was administered. This measure includes six items that are rated on a scale from (1) *strongly disagree* to (5) *strongly agree*. One example item is, "I have a strong attachment towards my own ethnic group." The MEIM-R has two subscales including exploration and commitment. Higher scores on this measure indicate greater commitment or exploration of identity. A total ethnic identity score and subscale scores will be calculated. According to Phinney and Ong (2007) the Cronbach's alphas were .81 for the combined scale, .78 for commitment, and .76 for exploration.

**The Collective Self-Esteem Scale** (CSES; Luhtanen & Crocker, 1992) was also used to assess racial identity. The questionnaire includes 16 items with four subscales: membership self-esteem, private collective self-esteem, public collective self-esteem, and importance to identity. All items are rated on a seven-point scale from (1) *strongly disagree,* to (7) *strongly agree*. One example item from the public collective self-esteem subscale is, "Overall, my racial/ethnic group is considered good by others." Luhtanen and Crocker (1992) advise against calculating an overall composite score and instead suggest computing individual subscale scores. According to Luhtanen and Crocker, the Cronbach's alphas

ranged from .73 for the membership scale, .74 for private, .80 for the public scale and .76 for the identity scale.

**Eating Pathology**. The Dutch Eating Behavior Questionnaire (DEBQ; Van Strien, Frijters, Bergers, & Defares, 1986) examines intentional and planned weight control. The questionnaire includes 33 items with three subscales; restrained eating (10 items), emotional eating (13 items), and external eating (10 items). All items are rated on a five-point scale from (1) *never* to (5) *very often*. One example item is, "How often in the evening do you try not to eat because you are watching your weight?" Higher scores indicate increased levels of dieting, planned weight control, and overall restraint behaviors. Cronbach's alpha for this scale range from .80 for external eating to .95 for restrained eating (Van Strien et al., 1986).

**Procedure**

The current study was presented to participants as an investigation regarding the effectiveness of fashion advertisements. Participants were randomly assigned to one of two experimental conditions; they either viewed fashion advertisements including a general warning label or not. All participants were matched to a set of stimuli based on race. According to the participants' responses, there were two levels: White and Women of Color (WOC). This means that randomization occurred after participants were separated by race.

After providing consent, participants viewed each image for 20 seconds, totaling two minutes. A slideshow of images was created using Apple's Keynote Presentation program and embedded into the online survey format. After viewing the slideshow, participants completed all measures online: sociocultural attitudes towards appearance, self-objectification, racial identity, state self-esteem, body dissatisfaction, body comparison, eating pathology, and perceived realism.

During debriefing I included a statement regarding potential negative impacts of viewing fashion advertisements. The following statement was included, "If you became distressed at any time during the study, you can contact the counseling center at Roosevelt University. If you have concerns about your eating behaviors or attitudes, you should contact the counseling center at Roosevelt University."

**Power Analysis**

I conducted an a priori power analysis to assess whether the sample size would be adequate to detect significant effects. Per Cohen's (1992) research, the specification for power was set at .80. In order to estimate the appropriate population effect size, I examined relationships between media exposure to the thin-ideal, body dissatisfaction, thin-ideal internalization, sociocultural attitudes towards appearance, perceived realism, and instructional set. Results of the literature review reported medium to large effect sizes. For example, Slater et al. (2012) determined that perceived realism was moderately impacted by a warning label telling participants of the true nature of fashion advertisements ($d = -.51$). In addition, viewing and making positive implicit associations towards thin images greatly impacts women's body dissatisfaction, drive for thinness, and social comparison (Hargreaves & Tiggemann, 2003; Ahern et al., 2008; Groesz et al., 2002; Bissell & Rask, 2010). Given a medium effect size, an alpha set at .05, and power of .80, using multiple regression analysis with three predictors, Cohen suggested 76 participants.

## Results Section

**Characteristics of the Sample**

While I intended to directly examine the responses of White and African American participants on the selected measures, the participant sample was unbalanced racially, with

over 57% of females labeling themselves as Caucasian and 16.8% identifying as African American. This translated to 92 participants who were White and 27 who were African American. As a result, the power and reliability of statistical analyses were limited when examining experimental effects between these two groups.

To address this concern, I have performed all statistical analyses twice. The first set of analyses included data from White participants' and participants of Color - defined as any female who did not identify as Caucasian ($n = 69$). In the second set of analyses, I focused specifically on analyzing the responses of White participants and African American participants ($n = 27$). Accordingly, the first set of statistical analyses presented for each hypothesis included White women and all Women of Color. Subsequently, results for statistical analyses using only African American and White women are presented.

Chi-square analyses were conducted to examine potential differences in the age and racial makeup of participants in the experimental conditions. This statistical test was necessary since age was measured categorically using the following age groups: 18-24 years ($n = 90$), 25-35 years ($n = 48$), 36-45 years ($n = 7$), 46-55 years ($n = 3$), and 55 years plus ($n = 6$). Results showed no statistically significant group differences in either age, $X^2$ (4, N = 154) = 4.46, $p > .05$, or race $X^2$ (1, N = 161) = .169, $p > .05$. In other words, the age and race of participants were not significantly associated with condition assignment. Moreover, when analyses were performed using only African American and White participants, the Chi-square results failed to show significant differences in how participants of different races ($X^2$ (1, N = 119) = 3.03, $p > .05$) and ages ($X^2$ (4, N = 116) = 1.57, $p > .05$) were assigned to experimental conditions.

**Experimental Effects on Perceived Realism**

Hypothesis 1 predicted that the addition of warning labels on fashion images would reduce the perceived realism of these advertisements. To address this hypothesis, I conducted an independent samples t-test within the entire sample (WOC and White women) to examine whether there were any significant differences in perceived realism between participants who viewed fashion images with warning labels versus those who did not. I used perceived realism as the dependent variable and experimental condition (warning label vs. no warning label) as the independent variable. Results revealed no significant differences in the perceived realism of fashion images between the two experimental conditions $t(158) = -.953$, $p = .342$. This does not support hypothesis 1 and suggests that warning labels do not reduce women's perceived realism and attainability of fashion images.

I conducted a second independent samples t-test within the limited subsample (African American and White women) to examine whether there were any significant differences in perceived realism between participants who viewed fashion images with warning labels versus those who did not. I used perceived realism as the dependent variable and experimental condition (warning label vs. no warning label) as the independent variable. Results revealed no significant difference between experimental groups on perceived realism $t(117) = -1.084$, $p = .280$. This further suggests that the perceived realism of fashion advertisements does not change as a function of viewing images containing warning labels. Consequently, hypothesis 1 was not supported.

Interestingly, results revealed a marginal main effect of participants' race on their perceived realism of the advertisements, $F(1,156) = 2.796$, $p = .096$. In particular, WOC participants reported marginally greater increased perceived realism of fashion images

compared to White participants ($M_{WOC}$ = 6.53, *SD* = 2.46; $M_{WHITE}$ = 5.78, *SD* = 2.83). Women of Color viewed the fashion images in this study as moderately more realistic, achievable and attainable than White participants, regardless of whether they viewed a fashion image containing a warning label or not.

**Experimental Effects on Body Dissatisfaction**

Hypothesis 2A predicted that viewing a fashion advertisement containing a warning label would lead to lower body dissatisfaction among women. To address this hypothesis, I conducted an independent samples t-test within the entire sample (WOC and White women) for experimental condition (IV: warning label vs. no warning label) on body dissatisfaction (DV). Results revealed a marginally significant difference in body dissatisfaction between participants who viewed images containing warning labels (*M* = 2.47, *SD* = 2.21) and those who viewed images without such labels (*M* = 3.14, *SD* = 2.46), *t*(159) = -1.804, *p* = .073. Overall, women viewing fashion images containing warning labels reported marginally less body dissatisfaction, measured by the CDRS, than women viewing images without warning labels (see Table 3 for means). These results were replicated when analyses were run with African American and White women only *t*(117) = -1.698, *p* = .092. These results partially support hypothesis 2A.

Table 3

*Means (and Standard Deviations) for Body Dissatisfaction by Experimental Condition & Race*

| | Condition | | |
|---|---|---|---|
| Body Dissatisfaction | No Warning Label (n = 88) | Warning Label (n = 73) | Total (n = 161) |
| Total Meana (SD) | 3.14 (2.46) | 2.47 (2.21) | 2.83 (2.36) |
| White (n = 92) | 3.45 (2.16) | 2.70 (2.08) | 3.10 (2.14) |
| WOC (n = 69) | 2.74 (2.77) | 2.13 (2.37) | 2.48 (2.60) |
| AA (n = 27) | 2.44 (1.97) | 1.91 (2.12) | 2.22 (2.01) |

*Note*. Scale scores range from -8 to 8. Higher scores indicate increased body dissatisfaction. In addition, AA stands for African American.

**Race as a Moderating Variable**

Hypothesis 2B predicted that the effectiveness of warning labels on advertisements would be less pronounced for Women of Color than for White women in reducing body dissatisfaction. To examine this hypothesis and possible interaction I ran a two-way ANOVA within the entire sample (WOC and White women) that included race (White vs. WOC) and experimental condition (warning label vs. no warning label) as the independent variables and body dissatisfaction as the dependent variable. Results revealed a marginal main effect of participants' race on body dissatisfaction, $F$ (1,157) = 2.87, $p$ = .092. In particular, White female participants reported marginally greater rates of body dissatisfaction compared to Women of Color ($M_{WHITE}$ = 3.10, $SD$ = 2.14; $M_{WOC}$ = 2.48, $SD$ = 2.60). It was also predicted that there would be an interaction between the race of the participant and the experimental condition such that warning labels would have a bigger impact on White women versus Women of Color. However, a 2 (Race: White vs. Women of Color) x 2 (Condition: warning label vs. no warning label) ANOVA revealed no significant interaction of participants' race

and experimental condition on their body dissatisfaction $F$ (2,157) = .035, $p$ = .851. These results do not support hypothesis 2B and suggest that White women and Women of Color are not affected differently by the presence or absence of warning labels.

Finally, a 2 (Race: White vs. Women of Color) x 2 (Condition: warning label vs. no warning label) ANOVA focusing on White women and African American women also found a marginal effect of race on body dissatisfaction, $F$(1,115) = 3.72, $p$ = .056, and no interaction between participants' race and experimental condition on body dissatisfaction $F$ (2,115) = .057, $p$ = .812. These results also fail to support hypothesis 2B. There was no difference between White and Black women in the effectiveness of warning labels in reducing their body dissatisfaction.

**Internalization as a Moderating Variable**

Hypothesis 3 predicted that female participants' attitudes towards societal ideals, as measured by the SATAQ, would moderate the effects of viewing fashion images with warning labels on body dissatisfaction. In other words, I hypothesized that the relationship between warning labels and body dissatisfaction would be influenced by participants' attitudes towards societal ideals. I predicted that advertisements containing warning labels would have a greater effect for women reporting stronger attitudes and endorsement of societal ideals.

I first conducted a Pearson correlation analyses within the entire sample (WOC and White women) in order to determine whether the hypothesized moderator variable (attitudes towards societal ideals) was related to the dependent variable (body dissatisfaction). As women's attitudes towards societal ideals were positively and significantly correlated with body dissatisfaction ($r$ = .262, $p$ = .001), I could then examine the possibility that this

variable served as a moderator which altered the effectiveness of the warning labels in decreasing body dissatisfaction.

Next I used multiple regression analyses to examine the moderating effect of societal attitudes on the relationship between viewing advertisements with warning labels and women's body dissatisfaction. Multiple regression analysis is used to explain how much the use of warning labels, participants' attitudes towards societal ideals and the interaction between these factors can explain the variation in women's body dissatisfaction. To minimize problems of multicollinearity and permit direct interpretations of the reported coefficients, centered variables for the four subscales and total score of the attitudes towards societal ideals measure (SATAQ-3) were created (Aiken & West, 1991). These centered subscales were calculated by taking the participants' subscale raw score and subtracting the mean of that subscale across all participants.

As the measure of participants' attitudes towards societal ideals is composed of four subscales, and a total score, I entered each subscale separately within unique multiple regression equations, resulting in five total multiple regression analyses. This was necessary in order to determine whether specific dimensions of the attitudes towards societal ideals construct differentially influenced body dissatisfaction within women or moderated the effectiveness of the experimental condition. As a result, the multiple regression analyses considered each subscale (total score, pressure, generalized internalization, athletic internalization and information) as both an independent variable as well as a potential interaction variable along with the experimental condition. In creating the interaction terms I multiplied each dimension of attitudes towards societal ideals centered score and the experimental condition. The dependent variable remained body dissatisfaction.

**SATAQ Total Score as a Moderator Variable.**

The first multiple regression analysis was conducted with the entire sample (WOC and White women). This analysis used body dissatisfaction as the dependent variable and experimental condition (warning label vs. no warning label) as well as attitudes towards societal ideals total score as the independent variables. The independent variables were entered in the first step of the regression analysis, and the interaction term (attitudes towards societal ideals total score x experimental condition) was entered into the second step to examine moderation. Results of the first step of the regression indicated that experimental condition and attitudes towards societal ideals total score explained a significant amount of the variance in participants body dissatisfaction $F(2, 145) = 6.348$, $p = .002$, with an $R^2$ of .081. Further, this model revealed a significant main effect of participants' attitudes towards societal ideals on body dissatisfaction ($\beta = .251$, $t = 3.14$, $p = .002$). Participants reporting increased attitudes towards societal ideals indicated increased body dissatisfaction such that for every one unit increase in attitudes towards societal ideals, body dissatisfaction increased by .251. However, regression analyses did not reveal a significant interaction effect between attitudes towards societal ideals and experimental condition on body dissatisfaction ($\beta = .388$, $t = 1.49$, $p = .138$). The $\Delta R^2$ for the interaction term (model 2) was .014, adding only 1.4% to the model, which is not a significant addition. This suggests that the effectiveness of the experimental manipulation did not vary as a function of participant' overall attitudes towards societal ideals.

A similar pattern of results was observed when the same regression analysis was run using data from only White and African American participants. The model from step one of the regression, including the variables of experimental condition and attitudes towards

societal ideals total score was significant $F(2, 105) = 3.190$, $p = .045$, with an $R^2$ of .057. In other words, these two variables accounted for roughly 5.7% of the variance in the model. In addition, I replicated the significant main effect of attitudes towards societal ideals on body dissatisfaction ($\beta = .195$, $t = 2.05$, $p = .043$). However, these analyses also revealed a marginal interaction effect between attitudes towards societal ideals and experimental condition on women's body dissatisfaction ($\beta = .599$, $t = 1.96$, $p = .052$). The $\Delta R^2$ for the interaction term (model 2) was .034, adding 3.4% to the model, which is a significant addition. This suggests that the relationship between warning labels and body dissatisfaction might be influenced by participants' attitudes towards societal ideals. However, this finding was contrary to that of the entire sample and may be the result of limiting the sample, as the observed standardized beta coefficients were similar in both samples.

**SATAQ Pressure as a Moderator Variable.**

A second regression analysis was conducted within the entire sample (WOC and White women) that used body dissatisfaction as the dependent variable and experimental condition (warning label vs. no warning label) as well as attitudes towards societal ideals pressure subscale as independent variables. I entered the independent variables (experimental condition and attitudes towards societal ideals pressure score) in the first step of the regression analysis, and the interaction term (pressure score x experimental condition) into the second step to examine moderation. Results of the first step of the regression indicated that experimental condition and attitudes towards societal ideals pressure subscale explained a significant amount of the variance in participants body dissatisfaction $F(2, 155) = 12.905$, $p = .000$, with an $R^2$ of .143. Regression analyses also revealed both a significant main effect ($\beta = .351$, $t = 4.72$, $p = .000$) and a marginal interaction effect of the pressure subscale of

attitudes towards society ideals and warning label condition on body dissatisfaction ($\beta$= *.447,* $t$ = 1.78, $p$ = .077). The $\Delta R^2$ for the interaction term (model 2) was .017, adding 1.7% to the model, which was a significant addition. Women who reported increased pressure from the media and society to strive for the Western ideal indicated higher rates of body dissatisfaction. Moreover, this perceived pressure marginally moderated the relationship between viewing warning labels on advertisements and body dissatisfaction. In other words, the effect of warning labels on body dissatisfaction might be related to how much pressure women feel to achieve the Western, ultra-thin ideal standards of beauty (see Figure 1).

I ran the same regression analysis on the sample limited to African American and White women. I entered the independent variables (experimental condition and attitudes towards societal ideals pressure score) in the first step of the regression analysis, and the interaction term (pressure score x experimental condition) into the second step to examine moderation. The model from step one of the regression, including the variables experimental condition and attitudes towards societal ideals pressure was significant $F(2, 114) = 6.424$, $p$ = .002, with an $R^2$ of .101. In other words, these two variables accounted for roughly 10.1% of the variance in the model. An equivalent main effect of perceived pressure ($\beta$ = .277, $t$ = 3.12, $p$ = .002) and a statistically significant interaction between condition and perceived pressure to ascribe to the ultra-thin ideal on body dissatisfaction ($\beta$= .621, $t$ = 2.06, $p$ = .042) was also found within the sample limited to White and African American women. The $\Delta R^2$ for the interaction term (model 2) was .033, adding 3.3% to the model, which is a significant addition.

As a similar pattern was found for both African American and Women of Color, I further investigated the potential moderating variable of perceived pressure through a slope

analysis including the entire sample. Following the procedure for testing moderator effects using multiple regression outlined by Frazier, Tix, and Barron (2004), I conducted two regression analyses that involved dummy coding the experimental conditions and rerunning multiple regressions with the dependent variable remaining body dissatisfaction and the independent variable changing to the dummy coded versions as well as interaction term . In the first of the two regressions, the experimental condition variable was dummy coded with the warning label condition as 0 and no warning label condition as 1. Analysis revealed that the slope of participants perceived pressure was positive and marginally significant ($\beta$= .206, $p$ =.077). In the second regression, where the warning label condition was dummy coded as 1, the slope for perceived pressure was negative and achieved marginal statistical significance ($\beta$= -.171, $p$ = .077).

These results suggest that perceived pressure might have influenced body dissatisfaction more for participants' viewing images without warning labels more than participants' viewing images with warning labels (see Figure 1). This partially supports the notion

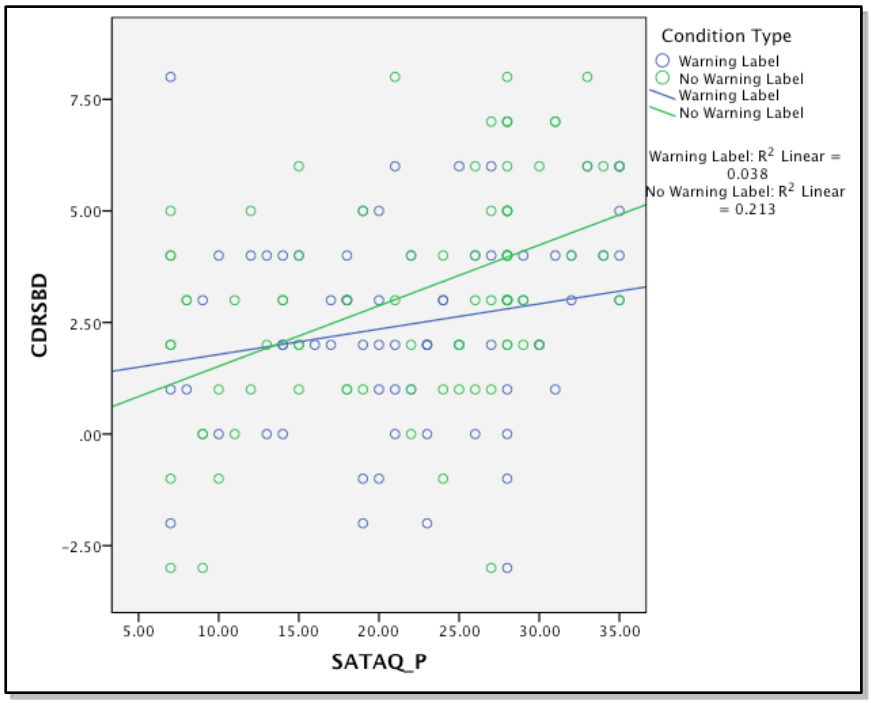


**Figure 1.**

*Moderation of women's perceives pressure to ascribe to ultra-thin ideals on the effectiveness of warning labels in reducing body dissatisfaction*.

that the perceived pressure may alter the relationship between the experimental condition and dependent variable of body dissatisfaction. Result suggests that the mechanism of change for warning labels might be in diminishing the effect of pressure placed on women to ascribe to the ultra-thin ideal.

**SATAQ Generalized Internalization as a Moderator Variable.**

The next multiple regression analysis conducted within the entire sample (WOC and White women) used body dissatisfaction as the dependent variable and experimental condition (warning label vs. no warning label) as well as the attitudes towards societal ideals generalized internalization score as the independent variables. The independent variables were entered in the first step of the regression analysis, and the interaction term (generalized internalization x experimental condition) was entered into the second step to examine moderation. The model from step one of the regression, including the variables experimental condition and generalized internalization was significant $F(2, 154) = 3.844$, $p = .024$, with an $R^2$ of .048. In other words, these two variables accounted for roughly 4.8% of the variance in the model. The model revealed a significant main effect for the generalized internalization dimension of attitudes towards societal ideals on body dissatisfaction ($\beta = .166$, $t = 2.12$, $p = .036$). Women who reported greater rates of internalizing the ultra-thin ideal indicated increased rates of body dissatisfaction. Nonetheless, no interaction between generalized internalization and experimental condition on body dissatisfaction was found ($\beta = .282$, $t = 1.12$, $p = .266$). The $\Delta R^2$ for the interaction term (model 2) was .008, adding only 0.8% to the model, which was not a significant addition.

In analyzing data limited to African American and White participants through the same multiple regression, there were opposite findings. The model from step one of the

regression, including the variables experimental condition and generalized internalization was not significant $F(2, 112) = 2.696$, $p = .072$, with an $R^2$ of .046. Moreover, the main effect for generalized internalization on body dissatisfaction diminished ($\beta = .148$, $t = 1.61$, $p = .111$). However, these analyses revealed a significant interaction effect of generalized internalization of the ultra-thin ideal and experimental condition on participants body dissatisfaction ($\beta = .681$, $t = 2.34$, $p = .021$). The $\Delta R^2$ for the interaction term (model 2) was .045, adding 4.5% to the model, which was a significant addition.

To examine the potential moderator variable of generalized internalization, I conducted a slope analysis on the dataset including White and African American participants. In the first regression, the experimental condition variable was dummy coded with the warning label condition as 0 and no warning label condition as 1. Then a multiple regression analysis was run using body dissatisfaction as the dependent variable and generalized internalization as well as the dummy coded experimental condition as the

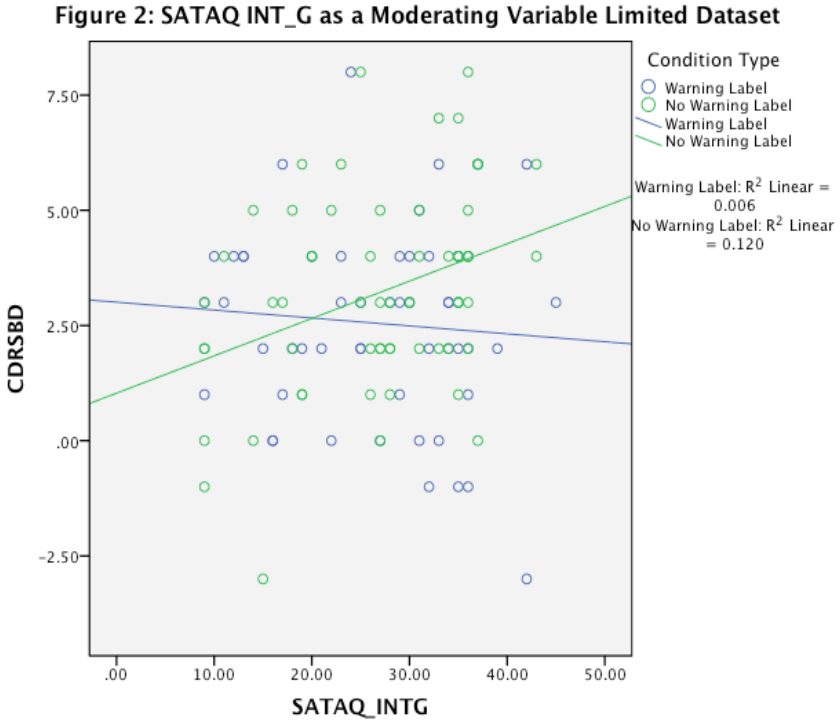


**Figure 2.**

*Moderation of women's generalized internalization on the effectiveness of warning labels in reducing body dissatisfaction*

independent variable. The slope for SATAQ generalized internalization in this analysis was positive and significant ($\beta$= .308, $p$ =.021). In the second regression, where the warning label condition was dummy coded as 1, the slope for SATAQ generalized internalization was negative and significant ($\beta$= -.293, $p$ = .021). These results suggest that SATAQ generalized internalization might influence body dissatisfaction more for participants' viewing images without warning labels more than participants' viewing images with warning labels (see Figure 2).

**SATAQ Athletic Internalization as a Moderator Variable.**

The next multiple regression analysis included the entire sample (WOC and White women) using body dissatisfaction as the dependent variable and experimental condition (warning label vs. no warning label) as well as the attitudes towards societal ideals athletic internalization score as the independent variables. The independent variables were entered in the first step of the regression analysis, and the possible interaction term (athletic internalization x experimental condition) was entered into the second step to examine moderation. The model from step one of the regression, including the variables experimental condition and athletic internalization was significant $F(2, 155) = 5.577$, $p$ = .005, with an $R^2$ of .067. In other words, these two variables accounted for roughly 6.7% of the variance in the model. Regression analysis of the athletic dimension of attitudes towards societal ideals replicated the main effect for this subscales' effect on body dissatisfaction ($\beta$ = .219, $t$ = 2.78, $p$ = .006). Participants who reported increased internalization of athletic ideals experienced increased body dissatisfaction. However, analyses did not support any interaction effect between athletic internalization and experimental condition on body dissatisfaction ($\beta$ = .150,

$t = .562$, $p = .575$). The $\Delta R^2$ for the interaction term (model 2) was .002, adding only 0.2% to the model, which was not a significant addition.

I ran a similar regression analysis on the sample limited to African American and White women. I entered the independent variables (experimental condition and attitudes towards societal ideals athletic internalization score) in the first step of the regression analysis, and the interaction term (athletic internalization x experimental condition) into the second step to examine moderation. The model from step one of the regression, including the variables experimental condition and athletic internalization was significant $F(2, 113) = 4.668$, $p = .011$, with an $R^2$ of .076. A main effect of athletic internalization but no interaction between athletic internalization and warning label condition on body dissatisfaction was found within this subsample (main effect: $\beta = .231$, $t = 2.51$, $p = .013$; interaction: $\beta = .234$, $t = .739$, $p = .461$). The $\Delta R^2$ for the interaction term (model 2) was .004, adding only 0.4% to the model, which was not a significant addition.

**SATAQ Information as a Moderator Variable.**

Lastly, I ran a multiple regression analysis on the entire sample (WOC and White women) in order to determine whether the information subscale of the attitudes towards societal ideals construct served as a moderator in the relationship between the experimental condition and dependent variable. In this analysis I used body dissatisfaction as the dependent variable and experimental condition as well as the attitudes towards societal ideals information score as the independent variables. The independent variables were entered in the first step of the regression analysis, and the possible interaction term (information scale x experimental condition) was entered into the second step to examine moderation. The model from step one of the regression, including the variables experimental condition and attitudes

towards societal ideals information subscale was not significant $F(2, 152) = 2.222$, $p = .112$, with an $R^2$ of .028. The information dimension of attitudes towards societal ideals revealed no significant main effects or interactions with body dissatisfaction (main effect: $\beta = .093$, $t = 1.16$, $p = .248$; interaction: $\beta = .275$, $t = 1.05$, $p = .294$). The $\Delta R^2$ for the interaction term (model 2) was .007, adding only 0.7% to the model, which was not a significant addition. In other words, there was no significant relationship between viewing the media as an important source of information about beauty standards and increased body dissatisfaction.

I ran a similar multiple regression analysis on the sample limited to African American and White women using body dissatisfaction as the dependent variable and experimental condition as well as the attitudes towards societal ideals information score as the independent variables. The independent variables were entered in the first step of the regression analysis, and the possible interaction term (information scale x experimental condition) was entered into the second step to examine moderation. The model from step one of the regression, including the variables experimental condition and attitudes towards societal ideals information subscale was not significant $F(2, 111) = 1.339$, $p = .266$, with an $R^2$ of .024. Results revealed no significant main effects of the information subscale of attitudes towards societal ideal on body dissatisfaction ($\beta = .045$, $t = .477$, $p = .634$). Results also illustrated no interaction effect between information and the experimental condition with body dissatisfaction ($\beta = .316$, $t = 1.03$, $p = .305$). The $\Delta R^2$ for the interaction term (model 2) was .009, adding only 0.9% to the model, which was not a significant addition.

Overall analyses provided mixed evidence which partially supported hypothesis 3. The SATAQ, which investigates women's attitudes towards societal ideals, is composed of four subscales and a total score. The four subscales of this measure examine distinct but

related dimensions of attitudes towards societal ideals. Multiple regression analyses on both the entire and limited samples revealed main effects for the following SATAQ subscales on participants' body dissatisfaction: perceived pressure, generalized internalization, athletic internalization and total score. These results suggest that women's body dissatisfaction may partially be explained by their perceived pressure to ascribe to Western beauty ideals, their level of internalization of generalized and athletic standards, and their overall attitudes towards media influence. Further analyses revealed a marginal interaction between the perceived pressure subscale of the SATAQ and experimental condition on women's body dissatisfaction. Women's perceived pressure to ascribe to beauty ideals marginally moderated the relationship between the experimental condition and body dissatisfaction.

**Racial Identity as a Moderating Variable**

Hypothesis 4 predicted that racial identity would moderate the impact of warning labels on Women of Color's body dissatisfaction. It was believed that Women of Color who report strong racial/ethnic identities would be less impacted by warning labels in comparison to Women of Color who have weaker racial identities. To explore this hypothesis I first performed independent samples t-tests within the entire sample (WOC and White women) to look for racial differences in racial identification. Results revealed a significant difference in racial identification ($t$ = -2.86, $p$ = .005) with Women of Color reporting higher levels of identification than White participants ($M_{WOC}$ = 21.12, $SD$ = 5.98; $M_{WHITE}$ = 18.45, $SD$ = 5.54). This difference in racial identification, however, diminished when I ran the same independent samples t-test examining only African American and White women ($t$ = -.975, $p$ = .332). While African American and White participants reported similar levels of racial identity, the

broader group of Women of Color reported significantly higher levels of racial identity than White women.

I next conducted a multiple regression analysis within the entire sample (WOC and White women) using body dissatisfaction as the dependent variable and experimental condition (warning label vs. no warning label) as well as race and racial identification as the independent variables. The independent variables (experimental condition, race, and racial identification) were entered in the first step of the regression analysis, and the interaction term (experimental condition x racial identification) was entered into the second step to examine the moderation. Analyses revealed a main effect for participants' race ($\beta$ = -.170, $t$ = -2.08, $p$ = .040) and a marginal effect for experimental condition ($\beta$ = .141, $t$ = 1.77, $p$ = .079) but no main effect for racial identification on body dissatisfaction ($\beta$ = .058, $t$ = .702, $p$ = .484). In addition, no interaction effect was supported for racial identity and experimental condition on body dissatisfaction ($\beta$ = .019, $t$ = .072, $p$ = .943). Further, no other two-way interactions significantly influenced body dissatisfaction, nor did the three-way interaction between race, racial identity and experimental condition significantly influence body dissatisfaction. These results fail to support hypothesis 4.

I conducted a similar multiple regression analysis within the limited sample of African American and White women using body dissatisfaction as the dependent variable and experimental condition as well as race and racial identification as the independent variables. The independent variables (experimental condition, race, and racial identification) were entered in the first step of the regression analysis, and the interaction term (experimental condition x racial identification) was entered into the second step to examine the moderation. Regression analyses including African American and White women revealed a significant

main effect for race ($\beta$ = -.205, $t$ = -2.25, $p$ = .027) and marginal main effects for condition ($\beta$ = .165, $t$ = 1.82, $p$ = .071) and racial identification ($\beta$ = .170, $t$ = 1.87, $p$ = .065) on body dissatisfaction. No significant two-way or three-way interaction effects involving racial identity and experimental condition on body dissatisfaction ($\beta$ = -.021, $t$ = -.072, $p$ = .943) were observed. These results also fail to support hypothesis 4. Racial identity does not serve as a moderator for the effectiveness of warning labels in reducing body dissatisfaction.

## Discussion

This study focused on examining the effectiveness of an intervention intended to reduce the negative psychological impact of media images on women. In particular, I investigated the effect of labeling fashion advertisements as digitally enhanced. The goal of these warning labels is to disrupt the association between exposure to the ultra-thin ideal and body dissatisfaction. Researchers have suggested that highlighting the artificiality of fashion images may serve to remind women that the pictures depicted in the media are not real, natural or attainable (Slater et al., 2012). Further, this reminder may help to reduce women's upward social comparisons, weight-related self-discrepancies, and aspirations to achieve this standard (Tiggemann et al., 2009). The results of our study provided mixed support for the effectiveness of warning labels as a tool to combat body dissatisfaction.

Following the procedure of Slater et al. (2012), I paired advertisements depicting ultra-thin models with warning labels that emphasized the artificial nature of the advertisements. I also investigated any differential effectiveness of this intervention among White women and Women of Color. All female participants viewed racially matched fashion advertisements, whereby White participants viewed images containing White models and participants of Color viewed images including models of Color. I predicted that women

would perceive fashion images with warning labels as less realistic than those without warnings. Contrary to Slater et al's findings, however, this hypothesis was not supported. This may suggest that warning labels do not alter women's ideas regarding the realism and attainability of the ultra-thin ideal. Moreover, due to the pervasive nature of upward social comparisons and constructs associated with the ultra-thin ideal, a one-time intervention highlighting the digital enhancement in fashion media may not be effective in altering women's long-standing beliefs about appearance (Hargreaves & Tiggemann, 2003). It is also possible that due to the rapid growth of social media and increased access to photo editing software, women are now more aware of the artificial nature of advertisements (Richardson, Paxton & Thomson, 2009; Bissell & Rask, 2010; Bennett, 2008). Consequently, women's sense of the perceived realism of fashion advertisements may not be significantly influenced by a warning label which illustrates something they already have knowledge about.

Interestingly, Women of Color viewed the fashion images in this study as moderately more realistic, achievable and attainable than White participants, regardless of whether they viewed a fashion image containing a warning label or not. Research has shown that people are more likely to engage in social comparisons with others when the target individual is deemed similar on certain physical or psychological characteristics, such as race or hair color (Bessenoff, 2006). By exposing participants to racially similar fashion models I believed I would obtain a more accurate assessment of how realistic women perceived the advertisements to be and their subsequent body dissatisfaction. Consequently, it was important to create an experimental design that would increase the likelihood of fostering these comparisons by making the advertisements and warning labels more relevant to the participants viewing them.

It was not expected that racially matching participants and models would result in Women of Color reporting increased rates of perceived realism when compared to White women. However, the uneven inclusion of racial diversity in mainstream media images may shed some light on this finding (Greenwood & Dal Cin, 2012). Women of Color likely view more advertisements featuring White models than models of Color due to discrimination, bias and the underrepresentation of minorities in advertising (Mastro & Stern, 2003). As a result, these women (as well as White women) likely become socially conditioned to view digitally altered White models as realistic and beautiful. Unfortunately, this fraudulent White beauty standard has permeated all fashion markets, which has led to the digital alteration of models of Color in order to emulate the White ideal.

Viewing racially similar models led Women of Color to engage in more social comparisons by making the targets (fashion models) appropriate. However, if it is true that Women of Color are used to viewing White models and have been socially conditioned to appreciate this beauty standard, they may not have enough exposure to digitally altered models of Color to understand the artificiality of these images. In other words, they may not believe or buy-in to the idea that models of Color are photoshopped similar to White models. In response, they may view fashion images as more realistic than their White counterparts.

The second hypothesis in this study proposed that viewing fashion images with warning labels would lead to decreased body dissatisfaction among women. The findings of this dissertation marginally support this prediction. It was also predicted that the effectiveness of warning labels would be less pronounced for Women of Color. In other words, while I hypothesized that warning labels would serve to decrease body dissatisfaction for all female participants, I believed that since Women of Color traditionally report fewer

body image concerns, the warning labels would not have as a great an effect for them as they would for White participants (Greenwood & Dal Cin, 2012). My results demonstrated that Women of Color indeed endorse marginally lower levels of body dissatisfaction overall than White women. However, there was no statistically significant difference in the effectiveness of the warning labels based on participants' race. As a result, this hypothesis was not supported. This suggests that warning labels are a promising intervention that could be used to reduce body dissatisfaction for all women. Moreover, since highlighting the artificial nature of fashion images worked to decrease body dissatisfaction within Women of Color as well as White women, this supports the current perspective that body image concerns are not exclusively problematic for White women (Grabe & Hyde, 2006).

Third, it was hypothesized that attitudes towards societal ideals would alter or moderate the effects of the warning labels on women's body dissatisfaction. In particular, I anticipated that the impact of the warning labels would be greater for women who reported: increased thin ideal internalization, pressure from the media to ascribe to this ideal, and viewing the media as an important source of information regarding appearance standards. Overall, this hypothesis had mixed support. Participants who acknowledged increased rates of media endorsement, internalization of the thin-ideal, and pressure to ascribe to the thin-ideal reported increased body dissatisfaction. In other words, women who admitted feeling and subscribing to media pressures to look a certain way reported increased body dissatisfaction. However, participants' overall attitudes towards societal ideals, internalization, and belief in the importance of the media in providing information about appearance did not alter (moderate) the effects of the warning labels. In other words, the warning labels were not more effective in decreasing body dissatisfaction among women

who internalized sociocultural beliefs regarding appearance when compared to women who did not. Moreover, the warning labels were not more successful among participants viewing the media as an important outlet for information regarding beauty standards.

It is of interest that the statistical significance of analyses regarding generalized internalization differed between the entire dataset and the one limited to White and African American participants. This contrary finding may have resulted from my attempts to racially match advertisements and participants. As I initially sought to examine body dissatisfaction within African American and White participants, the selection of stimuli may be biased towards African American women. It should be noted, that in both analyses, the association between internalization and body dissatisfaction was weakened when women viewed images containing warning labels as compared to when they did not.

Interestingly, the effectiveness of the warning labels in decreasing body dissatisfaction varied based on the participants' perceived pressure to ascribe to ultra-thin ideal. For female participants who indicated increased pressure from the media, viewing fashion images containing warning labels reduced their body dissatisfaction more significantly than for participants indicating similar media pressures who were not exposed to warning labels.

Overall, these findings support the notion that women's attitudes towards societal ideals are complex and dynamic constructs that play a role in the development and maintenance of negative body attitudes (Thompson et al., 2004). In addition, the perceived pressure dimension of these attitudes towards societal ideals is an important component of women's body dissatisfaction that should be considered for the development of future prevention techniques.

Lastly, it was predicted that participants' racial identity would moderate the impact of warning labels on women's reported body dissatisfaction. Research suggests that Women of Color who report positive and enduring beliefs about their own racial groups are more likely to reject the Western, thin-ideal (Henrickson, Crowther, & Harrington, 2010). In response, I believed that Women of Color reporting strong racial/ethnic identities would be less impacted by the warning labels than women who indicated weaker racial identities. In other words, warning labels would be less relevant to Women of Color who may have rejected the pressures to ascribe to the thin-ideal due to their ethnic values and standards of beauty. I hypothesized that these women would report reduced body dissatisfaction and diminished rates of thin-ideal internalization. Ultimately, my hypothesis was not supported and the effectiveness of the warning labels in this study did not change as a result of the participants' ethnic/racial identity. The addition of warning labels on fashion images was similarly effective for Women of Color and White women, regardless of their racial identity.

It is possible that racial identity is not as important a variable in the relationship between exposure to Western beauty ideals and body dissatisfaction as previously believed. However, given the unique discrimination Women of Color often experienced based on appearance, it is more plausible that this group faces specific challenges related to maintaining a strong sense of self and identity in terms of body image satisfaction when compared to White women (Oney, Cole, & Sellers, 2011). A recent ethnographic study of Women of Color in the United States examined how women dealt with and interpreted ultra-thin media messages (Cheney, 2011). Results revealed that young Women of Color experience unique stress related to body image. In particular, participants spoke of using their bodies as a vehicle for social mobility, power and as a way to decrease social inequalities

they experience (Cheney, 2011). For many of the women interviewed, being thin and ascribing to the ultra-thin ideal represented social power as well as increased dignity, access and status. Therefore the reasons why Women of Color experience a drive for thinness and body dissatisfaction may vastly differ from the reasons hypothesized for White women. If this is the case, then while warning Women of Color about the artificial nature of advertisements might decrease their body dissatisfaction as measured by this study, it likely did little to dissuade their aspirations to achieve media standards of beauty. So while racial identity as assessed in the current study may not have impacted the effectiveness of warning labels on Women of Colors' body dissatisfaction, Cheney's research suggests that this construct is likely much more complex than believed.

Research examining the effectiveness of interventions to mitigate the impact of exposure to the ultra-thin ideal on body dissatisfaction is limited and inconsistent (Holt & Ricciardelli, 2008; Stice & Shaw, 2004). Of the studies published regarding the use of warning labels, the same research team has produced conflicting results (Slater et al., 2012; Tiggemann et al., 2013). Consequently, this study sought to clarify the potential effectiveness of this particular style of intervention. Our results marginally replicated the finding that warning labels work to reduce women's body dissatisfaction. Moreover, while Women of Color reported slightly lower levels of body dissatisfaction compared to White women, viewing warning labels reduced body dissatisfaction similarly in both groups. This suggests that adding warning labels on fashion advertisements may comparably reduce body dissatisfaction for both White women and Women of Color.

When considered in concert with Slater et al's (2012) work, I can conclude that warning labels might be effective in reducing body dissatisfaction for both White women and

Women of Color. Nonetheless, the conflicting results of the various studies conducted on warning labels highlight the complexity of body dissatisfaction, its development and its prevention. For example, this study demonstrated that perceived media pressure to ascribe to the ultra-thin ideal might serve as a moderating variable in the relationship between viewing warning labels on fashion advertisements and body dissatisfaction. This means that the impact of this prevention strategy may partially depend on women's sense of feeling pressure from the media to ascribe to Western appearance ideals. In fact, the addition of warning labels on fashion images was more effective in reducing body dissatisfaction for women who reported increased levels of perceived pressure to conform to the ultra-thin ideal. Research suggests that these media pressures can be observed through the implicit associations women often make between positive attributes such as beauty, success and happiness with underweight models (Ahern et al., 2008). In other words, women perceive subconscious media pressures to be thin which leads them to make positive assumptions about the lives of thin fashion models and engage in more frequent upward social comparisons with these targets (Ahern et al., 2008). In response, reducing the frequency of these social comparisons by adding warning labels to fashion images will likely be most useful in reducing body image dissatisfaction for those women who report increased media pressures to achieve the ultra-thin ideal.

Social comparison theory is central to understanding the mechanisms underlying the development of negative body attitudes (Tiggemann & McGill, 2004). When women feel pressure to look a certain way, they gauge their perceived worth on dimensions such as appearance by comparing themselves to the standards being depicted. Unfortunately, women often perceive a discrepancy between how they look and the societal ideal, which increases

body dissatisfaction and eating disordered symptoms (Ahern et al., 2008; Cattarin, Thompson, Thomas, & Williams, 2000). With this in mind, researchers have examined the efficacy of various prevention and treatment strategies that focus on women's tendency to engage in upward social comparisons (Posavac et al., 2001; Martin & Xavier, 2010; Lew et al., 2007).

One way to ameliorate the negative psychological impact of exposure to the ultra-thin ideal is by having women engage in written downward social comparisons with media images of fashion models on non-appearance dimensions such as intelligence (Lew et al., 2007). This process serves to introduce balance into women's social comparisons and shifts the focus of these comparisons onto positively valued characteristics of the self. Another prevention strategy involved making ultra-thin models inappropriate targets for social comparison (Posavac et al., 2001). Participants viewed videotapes of psychologists speaking about the reasons why ultra-thin models were inappropriate targets for social comparisons. Both video themes — one focusing on the artificial nature of the ultra-thin ideal and the other focusing on the genetic reasons models are inappropriate targets — functioned similarly to reduce body image disturbance among women (Posavac et al., 2001). Finally, research suggests that appropriately labeling images of fashion models as underweight serves to decrease body dissatisfaction among female adolescents and reduce their upward social comparisons (Veldhuis et al., 2012).

This dissertation similarly emphasized altering the nature of upward social comparisons in which women engage. I hypothesized that the warning labels in this study would serve as a real-time reminder to the participants that the images they viewed were digitally altered. By highlighting the artificial characteristics of the ultra-thin ideal, I believed

this would increase women's knowledge regarding society's fabricated concepts of beauty, which would in turn remove some of the perceived pressure to ascribe to these ideals. In other words, I felt that if women were more consciously aware of the truth behind images in advertising, they would experience decreased pressure to attain this unrealistic standard. Furthermore, by reducing this perceived pressure, women would be more apt to disregard beauty ideal messages and engage in fewer upward social comparisons, which is key to reducing body dissatisfaction (Dijkstra, Gibbons, & Buunk, 2010). In line with our hypotheses, results revealed that warning labels were more effective in reducing body dissatisfaction for those women who indicated greater pressures from cultural messages related to appearance.

Besides decreasing women's engagement in upward social comparisons and reducing their perceived pressures to be thin, there are other potential mechanisms behind the effectiveness of adding warning labels on fashion images to reduce body dissatisfaction. Research illustrates that body dissatisfaction is associated with frequent misperceptions of ultra-thin media images (Willinge et al., 2006; Martijn, Sheeran, Wesseldijk, Merrick, & Webb, 2012). For example, women tend to underestimate the size of fashion models and celebrities and erroneously attribute their life success, happiness and desirability to being thin (Ahern et al., 2008; Evans, 2003; Willinge et al., 2006). This is of particular interest as researchers attempt to construct strategies to alter both the reflective and automatic components of social stereotypes, such as thin-models possessing positive attributes (Martijn et al., 2012). In response, the warning labels in this study may have led participants' to alter their perceptions about the models in the fashion images they viewed.

**Limitations of the Present Research**

As with any experiment, the results of this research should be considered within the context of its limitations. First, the sample size and characteristics restrict the generalizability of these findings to the greater population. The young female participants had a certain amount of privilege given they were in college. Due to their age, it is possible they were more well-versed in current photography and photo-editing trends. Moreover, they lived in a rather large, metropolitan area, where they may be more likely to encounter depictions of the ultra-thin ideal.

Given the fact that one aim of this study was to determine whether warning labels served to decrease body dissatisfaction among Women of Color, the resulting sample was rather small and heterogeneous. While I was particularly interested in assessing White women and African American women, due to the composition of this sample it was necessary to combine Women of Color from different racial backgrounds into one category. As a result any statistical analyses comparing experimental effects on African American women in comparison to White women were limited in terms of power and should be interpreted with caution. Moreover, some of the statistical effects calculated from the sample were marginal, with significance values above the .05 level. However, I felt it was important to consider these findings given the fact that this area of study is novel, with researchers producing conflicting results. As a result, it will be important to re-examine these experimental effects within a larger and more robust sample.

While researchers have begun to assess body image within minority women, their results suggest a rapidly changing and complex dynamic that includes interpersonal, cultural and social factors (Grabe & Hyde, 2006). Meta-analyses argue, for example, that Asian

American and Latina American women report statistically similar rates of body dissatisfaction to White women, but added that these three groups differ statistically in body dissatisfaction from African American women (Grabe & Hyde, 2006). As a result, combining Women of Color from different racial backgrounds for statistical analysis creates a category that is likely too inclusive and heterogeneous. Future research should examine the nature and expression of body dissatisfaction in Women of Color from different racial and cultural backgrounds separately. From this, our hope is that researchers can create specific prevention and treatment approaches to decrease body dissatisfaction among women in these unique groups.

A related limitation of this study concerns the experimental stimuli used. During the initial selection and pilot testing of fashion images I noticed a particular similarity among the models in terms of their skin tone. For both White models and models of Color in fashion advertisements, there was a rather restricted range of skin tones represented. It would be interesting to examine whether this has an impact on women's beauty attitudes and behaviors. It is possible that similarity in skin tone of fashion models may act as a moderator in the effectiveness of warning labels in reducing social comparisons and body dissatisfaction among women. Finally, as this study utilized the same style, placement, font and wording of warning labels as previous research in this area, it is possible that other styles of warning labels may be more effective in reducing body dissatisfaction (Slater et al., 2012).

To control for confounding variables such as brand loyalty, all labels, brand identifiers and extraneous information were removed from the advertisements. Additionally, women viewed a slideshow depicting four fashion images containing models along with two control images, lasting just over two minutes in duration. This methodology was likely not

representative of women's media consumption in a natural setting. In magazines, for example, advertisements are populated with branding and marketing strategies, such as slogans and celebrities in addition to containing a picture of a model. These are not only important selling points for a brand but also for beauty standards. Moreover, the average fashion magazine includes far more than four images of models emulating the thin-ideal. As a result, it would be important to determine how to experimentally examine the effectiveness of warning labels in a setting that emulates more typical media exposure. Research should also address prevention within other media outlets such as television, commercials, billboards, film and the internet.

**Proposals for Future Research**

Since contemporary research demonstrates that White and non-White women around the globe likely experience body dissatisfaction, researchers should focus on examining prevention and treatment strategies for all women (Barry & Grilo, 2002; Baugh et al., 2010; Cachelin, Phinney, Schug & Striegel-Moore, 2006). Given the group differences between Women of Color in terms of culture, background, values and beauty standards, it is equally imperative that we assess these variables within different groups individually (Grabe & Hyde, 2006). This will aid in developing a comprehensive understanding of the nature of unique beauty ideals worldwide and also help us determine how far-reaching Western beauty ideals are. This work may lead to a better understanding of the relationship between media exposure and body dissatisfaction and how race and culture influence this dynamic. Researchers would subsequently be able to formulate and examine the efficacy of prevention strategies geared towards various groups.

As Women of Color perceived fashion images depicting models of color as more realistic compared to White participants who viewed White models, future research may benefit from examining this relationship further. For example, it may be important to further investigate women's sense of perceived realism of racially unmatched, racially matched and racially mixed fashion images. In other words, are women more likely to view a fashion image containing a racially congruent model as realistic and attainable? What about a racially incongruent or mismatched model? Does a participants' sense of realism change as a function of the race of the model being depicted? Which of these choices would be most representative of women's everyday exposure to the media? Answering these questions will help us better understand the nature of the mechanisms underlying thin-ideal internalization and engagement in social comparisons. It will likely also help researchers create more effective, culturally sensitive and relevant ways to mitigate the negative effects of exposure to Western beauty ideals.

While warning labels with specific information about digital alterations failed to reduce body dissatisfaction among women in previous research, the small sample sizes and novelty of this area of research warrant further investigation regarding the style, wording, specificity and placement of these labels (Slater et al., 2012). In addition, I do not know whether certain types or styles of disclaimers would be more impactful for different groups (e.g. Women of Color, men). To answer these questions researchers should continue examining the efficacy of warning labels as a prevention strategy in decreasing body dissatisfaction. Additionally, given the time constraints of this study, the long term implications of adding warning labels on fashion images to reduce body dissatisfaction are unclear. It will therefore be important for researchers to create longer-term and more

extensive ways to implement and evaluate body dissatisfaction prevention techniques such as the use of warning labels on fashion images. In this regard researchers should consider using control groups as well as test-retest methodologies to assess the reliability and consistency of prevention methods. This will help to understand what will be required to alter women's body dissatisfaction in the long run.

**Sociopolitical Implications**

The implications of research in the area of body image dissatisfaction prevention are extensive. Since the popularity and access to various forms of photo-editing software has exponentially increased around the globe, it has become a topic of much controversy not only within social media circles but also on national platforms. Many European countries have begun to acknowledge the dangers of media exposure, and countries such as France, the United Kingdom and Australia are taking action to produce change (Slater et al., 2012). In France, legislation passed making it illegal to print digitally retouched images without a disclaimer or warning (Erlanger, 2009). Recently, Israel passed a piece of legislation called the "photoshop law," mandating that digitally altered models in advertising be labeled as such (Siegel-Itzkovich, 2013). Similarly in the United Kingdom, citizens and policy makers are currently campaigning for the mandatory addition of disclaimers on fashion advertising as well as a complete ban on digital alterations when the target market is youth under age 16 (Prince, 2009). Finally, in Australia a voluntary code of conduct has been created for reducing the incidence of eating disorders and reducing the impact of the thin-ideal (National Advisory Group on Body Image, 2009). The code includes a number of strategies to reduce the impact of the thin-ideal including the use of models who are diverse in terms of race,

body shape and size. The code also includes the principle of fair placement which refers to refraining from placing contradictory body image messages next to each other in advertising.

**Clinical Implications**

Besides the social-political ramifications, the findings from this study can also inform clinical level prevention and treatment efforts to counteract exposure to the ultra-thin ideal. Given the prevalence of body image concerns and eating disorders within college-aged groups, it is particularly important to holistically consider the applications of this work within college communities (Stice, Marti, & Rohde, 2013). First, I believe that these findings should be integrated into the current eating disorder prevention and positive body image efforts that have been established across major universities in the United States. For example, the Body Project is an empirically supported secondary prevention dissonance program, whereby women reporting body image concerns critique the ultra-thin ideal orally, in writing and through behavioral exercises (Stice, Mazotti, Weibel, & Agras, 2000). The Body Project involves a crucial factor in reducing body dissatisfaction - engaging students and educating them to become critical media consumers (Shaw, Stice, & Becker, 2008). As a result, it might be possible to use fashion images with warning labels as a tool to aid in this process.

Second, I recommend that psychologists and other mental health professionals working within the university setting integrate this study's finding that warning labels may serve to reduce body dissatisfaction among women regardless of race into their clinical trainings and professional practice. While research tells us that body image dissatisfaction is not limited to White, straight females, popular culture maintains this position, creating a situation where diverse students experiencing these concerns may fall through the cracks (Grabe & Hyde, 2006; Markey & Markey, 2005; Petrie, Tripp & Harvey, 2002). As a result,

it is essential that clinicians assess for body image concerns within diverse student groups, within a multicultural perspective. It is also important that clinicians function within a holistic and multidisciplinary context when treating students with body image concerns and eating disordered behaviors. In other words, while a psychoeducation or process group may help reduce symptoms for some students, others may not be comfortable with this. Despite the efforts of counseling centers, only about 11% of students utilize traditional therapy services, while an estimated 50% of enrolled students identify as multicultural, nontraditional or first generation (Watson, 2013). This means that clinicians need to be open minded to the changing roles of university counseling in order to meet the needs of today's college student (Watson, 2013). This is especially the case when tackling a broad sociocultural and mental health concern such as exposure to the ultra-thin ideal in mass media.

Given this information, our recommendation is that professionals working in college counseling centers should start by keeping themselves up-to-date on research in the area of body image dissatisfaction and eating disorders. It might also be helpful to include open discussions of body image and beauty standards within team meetings and didactic presentations. Professionally, therapists in this context should work to help students learn about the nature of social comparisons and the ultra-thin ideal. This can be done through psychoeducation, an open discourse, a presentation or body image program. Therapists should also help students learn to view the ultra-thin ideal as an inappropriate target for upward social comparisons. This may involve traditional talk-therapy, program outreach, visual media or peer-led courses (Halliwell et al., 2011).

**Conclusion**

Media exposure is linked to body image issues and dissatisfaction for women and is a risk factor for both eating disorders and other mental health concerns (Levine & Murnen, 2009; Grabe et al., 2008; Glauert et al., 2009). While there are a number of factors that contribute to body dissatisfaction such as genetics, family dynamics, peer-influence, attitudes towards societal ideals, demographics and fashion pressures, researchers submit that exposure to the media is the most pervasive (Glauert et al., 2009; Groesz et al., 2002; Kluck, 2010). Unfortunately, the media is unavoidable in this technological era and it is impossible to remove ourselves from this stressor entirely. Based on the increased prevalence of eating disordered attitudes and behaviors as well as body dissatisfaction, it is exceedingly important for researchers to develop interventions to combat and prevent these negative psychological outcomes (Aubrey, 2010; Halliwell et al., 2011; Stice & Shaw, 2004; Slater et al., 2012). In essence, researchers need to pinpoint a way to reduce the impact of the media as a stressor on women.

Despite its limitations, the present study provides evidence that viewing fashion advertisements containing warning labels might function to reduce body dissatisfaction, not only among White women but also among Women of Color. Our results also suggest that women's perceived pressure to ascribe to Western beauty ideals may act as a moderating variable in this relationship. In other words, the efficacy of warning labels may depend on the pressure women feel to realize and conform to the media's artificial ideas about beauty. Additional research needs to further investigate the impact of perceived pressure and other moderating variables on the relationship between exposure to the thin-ideal and body

dissatisfaction within women. This research will be paramount to the development of effective, culturally sensitive, and reliable prevention strategies.

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# Appendix A

Body Dissatisfaction

Roosevelt University Consent to Participate in Research.
The purpose of the study you are about to complete is to examine the effectiveness of fashion advertising on female audience members. If you participate in this project, you will be asked to view six, full-page fashion advertisements and then complete questionnaires that measure various aspects of emotions, cognitions, and behaviors. You will also be asked to complete some questions about general media consumption. The entire study will take approximately 25-30 minutes.

This research poses minimal risks to you as a participant. By participating in this experiment, you will learn about the research process. This research will also contribute to our psychological understanding of media advertising and consumption patterns. Your participation in this study is completely voluntary. You may withdraw from the experiment at any time without penalty.
Your responses will be kept confidential. If you complete the study for extra credit in a psychology course, you are not required to enter any identifying information. All of the information that you provide will be kept in a password protected file on the survey website and will only be available to the principal investigator and researchers working on the project.

I understand that if I have any other questions regarding this project, I can contact Olivia Carollo, M.A., at (727) 480-9038 or at ocarollo@mail.roosevelt.edu or Dr. Jill Coleman at (312) 341-2069 or at jcoleman@roosevelt.edu. If I would rather speak with someone other than the researchers, I can contact the Roosevelt University Institutional Review Board at (312) 853-4774 or the Faculty Research Ethics Officer at (312) 341-2440.

Continuing on to the next page will indicate your agreement to participate in the study.

# Appendix B

State Self-Esteem Questionnaire (Heatherton, & Polivy, 1991; SSEQ).This is a questionnaire designed to measure what you are thinking at this moment. There is of course, no right answer for any statement. The best answer is what you feel is true of yourself at the moment. Be sure to answer ALL of the items, even if you are not certain of the best answer. Again, answer these questions, as they are true for you RIGHT NOW.

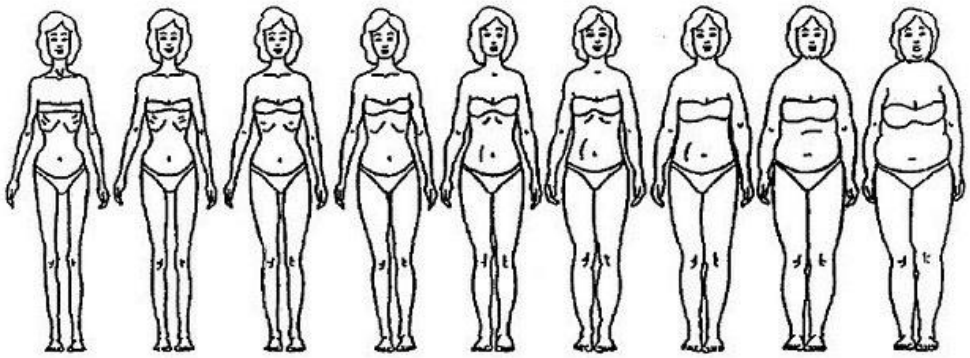
| | 1<br>Not At All | 2<br>A Little Bit | 3<br>Somewhat | 4<br>Very Much | 5<br>Extremely |
|---|---|---|---|---|---|
| I feel confident about my abilities. (1) | | | | | |
| I am worried about whether I am regarded as a success or failure. (2) | | | | | |
| I feel satisfied with the way my body looks right now. (3) | | | | | |
| I feel frustrated or rattled about my performance. (4) | | | | | |
| I feel that I am having trouble understanding things that I read. (5) | | | | | |
| I feel that others respect and admire me. (6) | | | | | |
| I am dissatisfied with my weight. (7) | | | | | |
| I feel self-conscious. (8) | | | | | |
| I feel as smart as others. (9) | | | | | |
| I feel displeased with myself. (10) | | | | | |
| I feel good about myself. (11) | | | | | |
| I am pleased with my appearance right now. (12) | | | | | |
| I am worried about what other people think of me. (13) | | | | | |
| I feel confident that I understand things. (14) | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| I feel inferior to others at this moment. (15) | | | | | |
| I feel unattractive. (16) | | | | | |
| I feel concerned about the impression I am making. (17) | | | | | |
| I feel that I have less scholastic ability right now than others. (18) | | | | | |
| I feel like I’ m not doing well. (19) | | | | | |
| I am worried about looking foolish. (20) | | | | | |

Appendix C

Contour Drawing Rating Scale (Thompson, & Gray, 1995; CDRS).

Carefully look at the 9 bodies above and answer the following:



| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Which figure best fits how you think you look? (1) | | | | | | | | | |
| Which figure best fits how you feel you look? (2) | | | | | | | | | |
| Which figure best fits other women's ideal? (3) | | | | | | | | | |
| Which figure best fits how you would like to look? (4) | | | | | | | | | |
| Which figure best fits how you feel men see you? (5) | | | | | | | | | |

# Appendix D

Body Parts Satisfaction Scale (Berscheid, Walster, & Bohrnstedt, 1973; BPSS).

How satisfied are you with each of the following body parts?

| | 1 Extremely Dissatisfied | 2 Quite Dissatisfied | 3 Somewhat Dissatisfied | 4 Somewhat Satisfied | 5 Quite Satisfied | 6 Extremely Satisfied |
|---|---|---|---|---|---|---|
| Facial Attractiveness (1) | | | | | | |
| Shoulders (2) | | | | | | |
| Arms (3) | | | | | | |
| Hands (4) | | | | | | |
| Feet (5) | | | | | | |
| Size of Abdomen (6) | | | | | | |
| Bust (7) | | | | | | |
| Buttocks (8) | | | | | | |
| Hips (9) | | | | | | |
| Upper Thighs (10) | | | | | | |
| Legs & Ankles (11) | | | | | | |
| Height (12) | | | | | | |
| Weight (13) | | | | | | |
| General Muscle Tone (14) | | | | | | |
| Overall Shape (15) | | | | | | |

Appendix E

Sociocultural Attitudes Towards Appears Questionnaire-3 (Thompson, Van den Berg, Roehrig, Guarda, & Heinberg, 2004; SATAQ-3).

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

| | 1 Definitely Disagree | 2 Mostly Disagree | 3 Neither Agree or Disagree | 4 Mostly Agree | 5 Definitely Agree |
|---|---|---|---|---|---|
| TV programs are an important source of information about fashion and ‘‘being attractive.’’ (1) | | | | | |
| I’ve felt pressure from TV or magazines to lose weight. (2) | | | | | |
| I would like my body to look like the people who are on TV. (3) | | | | | |
| I compare my body to the bodies of TV and movie stars. (4) | | | | | |
| TV commercials are an important source of information about fashion and ‘‘being attractive.’’ (5) | | | | | |
| I’ve felt pressure from TV or magazines to look pretty. (6) | | | | | |
| I would like my body to look like the models who appear in magazines. (7) | | | | | |
| I compare my appearance to the appearance of TV and movie stars. (8) | | | | | |
| Music videos on TV are an important source of information about fashion and ‘‘being attractive.’’ (9) | | | | | |
| I’ve felt pressure from TV and magazines to be thin. (10) | | | | | |
| I would like my body to look like the people who are in the movies. (11) | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| I compare my body to the bodies of people who appear in magazines. (12) | | | | | |
| Magazine articles are an important source of information about fashion and ‘‘being attractive.’’ (13) | | | | | |
| I’ve felt pressure from TV or magazines to have a perfect body. (14) | | | | | |
| I wish I looked like the models in music videos. (15) | | | | | |
| I compare my appearance to the appearance of people in magazines. (16) | | | | | |
| Magazine advertisements are an important source of information about fashion and ‘‘being attractive.’’ (17) | | | | | |
| I’ve felt pressure from TV or magazines to diet. (18) | | | | | |
| I wish I looked as athletic as the people in magazines. (19) | | | | | |
| I compare my body to that of people in ‘‘good shape.’’ (20) | | | | | |
| Pictures in magazines are an important source of information about fashion and ‘‘being attractive.’’ (21) | | | | | |
| I’ve felt pressure from TV or magazines to exercise. (22) | | | | | |
| I wish I looked as athletic as sports stars. (23) | | | | | |
| I compare my body to that of people who are athletic (24) | | | | | |
| Movies are an important source of information about fashion and ‘‘being attractive.’’ (25) | | | | | |
| I’ve felt pressure from TV or magazines to change my appearance. (26) | | | | | |
| I try to look like the people on TV. (27) | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Movies stars an important source of information about fashion and ‘‘being attractive.’’ (28) | | | | | |
| Famous people are an important source of information about fashion and ‘‘being attractive.’’ (29) | | | | | |
| I try to look like sports athletes. (30) | | | | | |

# Appendix F

Objectified Body Conscious Scale (McKinley, & Hyde, 1996; OBCS).

Please respond to the following statements according to how much you agree or disagree with them.

| | 1 Strongly Disagree | 2 Disagree | 3 Somewhat Disagree | 4 Neither Agree or Disagree | 5 Somewhat Agree | 6 Agree | 7 Strongly Agree |
|---|---|---|---|---|---|---|---|
| I rarely think about how I look (1) | | | | | | | |
| When I can't control my weight, I feel like something must be wrong with me. (2) | | | | | | | |
| I think a person is pretty much stuck with the looks they are born with. (3) | | | | | | | |
| I think it is more important that my clothes are comfortable than whether they look good on me (4) | | | | | | | |
| I feel ashamed of myself when I haven't made the effort to look my best. (5) | | | | | | | |
| A large part of being in shape is having that kind of body in the first place. (6) | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I think more about how my body feels than how my body looks. (7) | | | | | | | |
| I feel like I must be a bad person when I don't look as good as I could. (8) | | | | | | | |
| I think a person can look pretty much how they want to if they are willing to work at it. (9) | | | | | | | |
| I rarely compare how I look with how other people look. (10) | | | | | | | |
| I would be ashamed for people to know what I really weigh. (11) | | | | | | | |
| I really don't think I have much control over how my body looks. (12) | | | | | | | |
| During the day, I think about how I look many times. (13) | | | | | | | |
| I never worry that something is wrong with me when I am not exercising as much as I should (14) | | | | | | | |
| I think a person's weight is mostly determined by the genes they are born with. (15) | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I often worry about whether the clothes I am wearing make me look good. (16) | | | | | | | |
| When I'm not exercising enough, I question whether I am a good enough person. (17) | | | | | | | |
| It doesn't matter how hard I try to change my weight, it's probably always going to be about the same (18) | | | | | | | |
| I rarely worry about how I look to other people. (19) | | | | | | | |
| Even when I can't control my weight, I think I'm an okay person. (20) | | | | | | | |
| I can weigh what I'm supposed to if I try hard enough. (21) | | | | | | | |
| I am more concerned with what my body can do than how it looks. (22) | | | | | | | |
| When I'm not the size I think I should be I feel ashamed. (23) | | | | | | | |
| The shape you are in depends mostly on your genes. (24) | | | | | | | |

# Appendix G

Perceived Realism Questionnaire (Slater, Tiggemann, Firth, & Hawkins, 2012).

Thinking back to the advertisements you saw at the beginning of the study, to what extent would you agree...

| | Strongly Disagree (1) | Disagree (2) | Neither Agree nor Disagree (3) | Agree (4) | Strongly Agree (5) |
|---|---|---|---|---|---|
| The models in the fashion shoots were realistic. (1) | | | | | |
| The models in the fashion shoots were attainable for the average woman. (2) | | | | | |
| The models in the fashion shoots present a reasonable ideal for me. (3) | | | | | |

# Appendix H

Dutch Eating Behavior Questionnaire (Van Strien, Frijters, Bergers, & Defares, 1986; DEBQ).

| | 1<br>Never | 2<br>Seldom | 3<br>Sometimes | 4<br>Often | 5<br>Very Often |
|---|---|---|---|---|---|
| If you have put on weight, do you eat less than you usually do? (1) | | | | | |
| Do you try to eat less at mealtimes than you would like to eat? (2) | | | | | |
| How often do you refuse food or drink offered because you're concerned about your weight? (3) | | | | | |
| Do you watch exactly what you eat? (4) | | | | | |
| Do you deliberately eat foods that are slimming? (5) | | | | | |
| When you have eaten too much, do you eat less than usual the following days? (6) | | | | | |
| Do you deliberately eat less in order not to become heavier? (7) | | | | | |
| How often do you try not to eat between meals because you're watching your weight? (8) | | | | | |
| How often in the evenings do you try not to eat because you're watching your weight? (9) | | | | | |
| Do you take into account your weight with what you eat? (10) | | | | | |
| Do you have the desire to eat when you're irritated? (11) | | | | | |
| Do you have a desire to eat when you have nothing to do? (12) | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Do you have a desire to eat when you're depressed or discouraged? (13) | | | | | |
| Do you have a desire to eat when you're feeling lonely? (14) | | | | | |
| Do you have a desire to eat when somebody lets you down? (15) | | | | | |
| Do you have a desire to eat when you're cross? (16) | | | | | |
| Do you have a desire to eat when you're approaching something unpleasant to happen? (17) | | | | | |
| Do you have a desire to eat when you're anxious, worried, or tense? (18) | | | | | |
| Do you have a desire to eat when things are going against you or when things have gone wrong? (19) | | | | | |
| Do you have a desire to eat when you're frightened? (20) | | | | | |
| Do you have a desire to eat when you're disappointed? (21) | | | | | |
| Do you have a desire to eat when you're emotionally upset? (22) | | | | | |
| Do you have a desire to eat when you're bored or restless? (23) | | | | | |
| If food tastes good to you, do you eat more than usual? (24) | | | | | |
| If food smells & looks good, do you eat more than usual? (25) | | | | | |
| If you see or smell something delicious; do you have a desire to eat it? (26) | | | | | |
| If you have something delicious to eat, do you eat it straight away? (27) | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| If you walk past the baker, do you have the desire to buy something delicious? (28) | | | | | |
| If you walk past a snack bar or a cafe, do you have the desire to buy something delicious? (29) | | | | | |
| If you see others eating, do you also have the desire to eat? (30) | | | | | |
| Can you resist eating delicious foods? (31) | | | | | |
| Do you eat more than usual, when you see others eating? (32) | | | | | |
| When preparing a meal are you inclined to eat something? (33) | | | | | |

# Appendix I

Body Comparison Scale (Fisher, Dunn, & Thompson, 2002; BCS).

How often do you compare these aspects of your body to those of other individuals of the same sex?

| | 1<br>Never | 2<br>Rarely | 3<br>Sometimes | 4<br>Often | 5<br>Always |
|---|---|---|---|---|---|
| Hips (1) | | | | | |
| Buttocks (2) | | | | | |
| Thighs (3) | | | | | |
| Waist (4) | | | | | |
| Teeth (5) | | | | | |
| Stomach (6) | | | | | |
| Hair (7) | | | | | |
| Overall Shape Lower Body (8) | | | | | |
| Overall Body (9) | | | | | |
| Muscle Tone Lower Body (10) | | | | | |
| Chest (11) | | | | | |
| Overall Shape Upper Body (12) | | | | | |
| Calves (13) | | | | | |
| Upper Arm (14) | | | | | |
| Shoulder (15) | | | | | |
| Forearm (16) | | | | | |
| Muscle Tone Upper Body (17) | | | | | |
| Cheeks (18) | | | | | |
| Lips (19) | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Nose (20) | | | | | |
| Shape of Face (21) | | | | | |
| Back (22) | | | | | |
| Forehead (23) | | | | | |
| Ears (24) | | | | | |
| Chin (25) | | | | | |

Appendix J

Collective Self-Esteem Scale (Luhtanen, & Crocker, 1992; CSES).

INSTRUCTIONS: We are all members of different social groups or social categories. We would like you to consider your race or ethnicity (e.g., African-American, Latino/Latina, Asian, European-American) in responding to the following statements. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully, and respond by using the following scale from 1 to 7:

| | 1 Strongly Disagree | 2 Disagree | 3 Disagree Somewhat | 4 Neutral | 5 Agree Somewhat | 6 Agree | 7 Strongly Agree |
|---|---|---|---|---|---|---|---|
| I am a worthy member of my race/ethnic group (1) | | | | | | | |
| I often regret that I belong to my racial/ethnic group (2) | | | | | | | |
| Overall, my racial/ethnic group is considered good by others (3) | | | | | | | |
| Overall, my race/ethnicity has very little to do with how I feel about myself. (4) | | | | | | | |
| I feel I don't have much to offer to my racial/ethnic group (5) | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| In general, I'm glad to be a member of my racial/ethnic group. (6) | | | | | | | |
| Most people consider my racial/ethnic group, on the average, to be more ineffective than other groups. (7) | | | | | | | |
| The racial/ethnic group I belong to is an important reflection of who I am. (8) | | | | | | | |
| I am a cooperative participant in the activities of my racial/ethnic group. (9) | | | | | | | |
| Overall, I often feel that my racial/ethnic group is not worthwhile. (10) | | | | | | | |
| In general, others respect my race/ethnicity. (11) | | | | | | | |
| My race/ethnicity is unimportant to my sense of what kind of a person I am. (12) | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I often feel I'm a useless member of my racial/ethnic group. (13) | | | | | | | |
| I feel good about the race/ethnicity I belong to. (14) | | | | | | | |
| In general, others think that my racial/ethnic group is unworthy. (15) | | | | | | | |
| In general, belonging to my race/ethnicity is an important part of my self-image. (16) | | | | | | | |

# Appendix K

Multigroup Ethnic Identity Measure (Phinney, & Ong, 2007; MEIM-R).

In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of ethnic groups are Latino, African American, Mexican, Asian American, Chinese, and many others. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

| | 1<br>Strongly Disagree | 2<br>Disagree | 3<br>Neither Agree or Disagree | 4<br>Agree | 5<br>Strongly Agree |
|---|---|---|---|---|---|
| I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs. (1) | | | | | |
| I have a strong sense of belonging to my own ethnic group. (2) | | | | | |
| I understand pretty well what my ethnic group membership means to me. (3) | | | | | |
| I have often done things that will help me understand my ethnic background better. (4) | | | | | |
| I have often talked to other people in order to learn more about my ethnic group. (5) | | | | | |
| I feel a strong attachment towards my own ethnic group. (6) | | | | | |

Appendix L

Please estimate how many total hours of television you think you watch during an average week? _____

Which TV network do you view the MOST? _____

What time of day you watch the most television?
❍ Morning (1)
❍ Afternoon (2)
❍ Early Evening (3)
❍ Prime Time (8PM-11PM) (4)
❍ Late Night (5)

How many times do you go to the movie theater in an average month?
❍ 0-1 times (1)
❍ 1-2 times (2)
❍ 3-4 times (3)
❍ 5+ times (4)

What types of magazines do you normally read? (Check ALL that apply)
❍ Adult (FHM, Playboy, etc.) (1)
❍ Auto (2)
❍ Fashion (Vogue, Elle, etc.) (3)
❍ Health & Fitness (4)
❍ Home Life & Cooking (5)
❍ Industry (6)
❍ Popular Culture & Gossip (Star, People, etc.) (7)
❍ Science & Technology (8)
❍ Women's (9)
❍ Other (10) _____

How old are you?
❍ 18-24 years old (1)
❍ 25-35 years old (2)
❍ 36-45 years old (3)
❍ 46-55 years old (4)
❍ 55+ (5)

Are you CURRENTLY a...
- ❍ Undergraduate Student (1)
- ❍ Master's Student (2)
- ❍ Doctoral Student (3)
- ❍ Other (4) _____

What is your religious affiliation?
- ❍ Christian (1)
- ❍ Catholic (2)
- ❍ Jewish (3)
- ❍ Buddhist (4)
- ❍ Hindu (5)
- ❍ Islamic (6)
- ❍ Agnostic (7)
- ❍ Atheist (8)
- ❍ Other (9) _____

What is your current marital status?
- ❍ Single, never married (1)
- ❍ Married without children (2)
- ❍ Married with children (3)
- ❍ Divorced (4)
- ❍ Separated (5)
- ❍ Widowed (6)
- ❍ Living w/ partner (7)