THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE

DEPARTMENT OF ADVERTISING/PUBLIC RELATIONS

EXAMINING HOW THE MEDIAS PORTRAYAL OF OBESE INDIVIDUALS EFFECTS
BODY SATISFACTION AND SELF-ESTEEM

BROOKE STAFFORD
SPRING 2017

A thesis
submitted in partial fulfillment
of the requirements
for baccalaureate degrees
in Advertising/Public Relations and Psychology
with honors in Advertising/Public Relations

Reviewed and approved* by the following:

Colleen Connolly-Ahern
Associate Professor of Communications
Thesis Supervisor

Michel M. Haigh
Associate Professor of Communications
Honors Adviser

*Signatures on file in the Schreyer Honors College
Abstract

Research shows obese individuals are stigmatized in their daily lives and that the media is a pervasive form of such stigma. A survey was created and distributed to women over the age of 18 in the United States. Results suggest the stigmatization of obese women in advertising may have an affect on female body dissatisfaction and self-esteem.
# Table of Contents

ACKNOWLEDGEMENTS ................................................................................................................................. iii

Chapter 1 Introduction ........................................................................................................................................ 1

Chapter 2 Literature Review ............................................................................................................................ 6
  Social Comparison Theory ................................................................................................................................. 6
  Social Comparison Theory and Advertising ................................................................................................. 7
  Upward Social Comparisons ......................................................................................................................... 7
  Downward Social Comparisons ..................................................................................................................... 9

Obesity in the Media ........................................................................................................................................ 13

The Media’s Impact on Body Image and Self-Esteem ...................................................................................... 14

BMI and its Relationship with Self-Esteem and Body Dissatisfaction ......................................................... 16

Chapter 3 Methods ........................................................................................................................................... 18

Chapter 4 Results ............................................................................................................................................. 21
  Table 1: Scores for Dependent Variables Based on Advertisement Type .................................................... 23
  Table 2: Scores for Dependent Variables Based on BMI ............................................................................ 23

Chapter 5 Discussion ....................................................................................................................................... 24

Appendix A (IRB Approval) ............................................................................................................................. 28

Appendix B (Ads Used) .................................................................................................................................... 29

Appendix C (Scales Used) ............................................................................................................................... 30

REFERENCES ....................................................................................................................................................... 31
ACKNOWLEDGEMENTS

Thank you a million times to my thesis supervisor, Dr. Colleen Connolly-Ahern. Thank you for your expertise, your encouragement, and for keeping me sane during this process. Ultimately, you led me to pursue the topic of body image, which is something I have always been interested in researching. My thesis is what it is because of you, and I could not be more proud of the results.

Additionally, I would like to thank my honors advisor, Dr. Michel Haigh, for pushing me to better my writing, my APA-style, my statistical analysis skills, and myself. I could have never accomplished this paper without you. Michel, your work ethic, patience, and passion inspired me throughout this entire process and I could not be more grateful.

I cannot thank you both enough for the support, reassurance, and help you provided me this past year. I am truly blessed to have had you as not only professors, but as role models and mentors.

To my friends and family: Thank you for cheering me on and lifting me up during my good and bad days. I would not have survived this past year without your tough love, support, and enthusiasm.
Chapter 1
Introduction

Decades of research have shown overweight and obese individuals are subject to weight-based bias, stigmatization, and discrimination in various social and professional situations ("Obesity, Bias, and Stigmatization," 2016; McClure, Puhl, & Heuer, 2011). Obese persons experience stigmatization in medical facilities, educational settings, the workplace, and in intimate relationships with family and friends. Furthermore, recent studies have shown weight-based stigmatization and discrimination has increased dramatically (66 percent) in the past few years, and it now rivals racial discrimination in the United States (McClure et al., 2011).

With such high rates of weight-based stigma, it should come as no surprise those affected can experience severe emotional and/or physical impairments. According to the Obesity Society, obese individuals who experience weight-stigma have higher rates of anxiety, social isolation, and depression ("Obesity, Bias, and Stigmatization," 2016). Obese persons may also internalize negative attitudes and treatment that can damage their self-esteem, body image, and body satisfaction ("Obesity, Bias, and Stigmatization," 2016; McClure et al., 2011).

The media illustrates just how pervasive weight stigma is in today’s society (Puhl & Heuer, 2009). When obese individuals are depicted on screen or in print, they are often illustrated in a stereotypical, negative manner (McClure et al., 2011). Obese individuals are frequently portrayed as lazy, disagreeable, sloppy, incompetent, and unable to practice self-discipline. They are also recurrent targets of ridicule and humor (McClure et al., 2011).

Existing research has proven the media’s negative portrayal of obese individuals affects the general population’s attitudes about fat and contributes to weight-based stigma and discrimination (Frederick et al., 2016; McClure et al., 2011). Frederick, Saguy, Sandhu, and
Mann’s (2016) experimental research studied the effects of exposure to fat-negative versus fat-positive news articles. The main objective of their research was to see how the different components (operationalized by healthiness, controllability, discrimination acceptability) of the positively or negatively framed news articles affect society’s attitudes about fatness (Frederick et al., 2016). Frederick and colleagues (2016) predicted the negatively framed articles would induce more negative attitudes about fatness than the positively framed articles.

Fredrick and colleagues’ (2016) exposed participants to one of four news articles—framed either positively or negatively regarding stereotypes about fatness. People who were in the positive framing condition read a story stating fatness is not always unhealthy nor controllable and that discrimination is unacceptable. People who were in the negative framing condition read a story stating fatness is unhealthy and controllable and that discrimination is acceptable. After reading the articles, the participants were asked to complete a scale measures. Frederick and colleagues’ (2016) found fat-positive participants recorded weaker beliefs that fat is unhealthy, and fat-negative participants recorded stronger beliefs fat is unhealthy. In addition, fat-negative participants recorded more anti-fat stigma than fat-positive participants (Frederick et al., 2016).

Frederick and colleagues’ (2016) research is significant because it discusses how the media can influence readers’ opinions and attitudes. Their research also suggests when obese people are framed in a certain way (negatively or positively) society is more or less likely to stigmatize obese individuals—a concept important to the present study. If article frames can lead people who are not overweight or obese to stigmatize obese individuals, it may also be possible that overweight and obese people (BMI of 26 or over) feel stigmatized themselves.
News media is only one medium that portrays obese individuals negatively. Another aspect associated with weight bias is photography. McClure et al.’s (2011) research analyzed how photographic portrayals of obese individuals affects attitudes about obesity. The researchers used a randomized experiment to test whether viewing stereotypical or unflattering photographs of an obese individual could increase negative attitudes about obesity. McClure et al. (2016) hypothesized if a photograph is stereotypical or unflattering (vs. non-stereotypical and flattering), participants would have more negative attitudes about obese individuals. Participants were given a neutral news story about obesity rates in the U.S. (McClure et al., 2011). It was accompanied by one of four photographs that portrayed obese individuals in a stereotypical, non-stereotypical, flattering, or unflattering light. After reading the neutral news story and looking at the accompanying photograph, participants were asked a series of questions about their attitudes towards obesity. The participants were also asked to complete a fat phobia scale (McClure et al., 2011).

The results of the experiment were consistent with the researchers’ hypothesis. McClure and colleagues (2011) found the positive portrayal group recorded the lowest levels of weight bias, the neutral condition recorded middle-tier weight bias, and the negative portrayal group recorded the highest levels of weight bias (McClure et al., 2011).

McClure and colleagues’ (2011) study is significant because it focuses on aspects of the media and how obesity stigma is associated with negatively or positively framed pieces of news media. The results of this research study support Frederick and colleagues’ (2016) results because when the subject was framed in a negative way (stereotypically), weight bias increased, just as anti-fat stigma increased.
The media’s portrayal of thin models in comparison to overweight models is another exemplar of how the media influences attitudes about fat and, in turn, body satisfaction. A research study by Tucci and Peters (2008) aimed to examine how the media portrayals of thin models effected evaluations of females’ own bodies (body satisfaction) and also of eating disorder symptomatology. It was hypothesized female body satisfaction would be lower following exposure to “thin ideal” media images in magazines in comparison to overweight media images in magazines. Body satisfaction was operationalized using the body dissatisfaction scale (Tucci & Peters, 2008).

Participants were given a questionnaire and a visual analogue scale (VAS) (Tucci & Peters, 2008). Next, the participants viewed either a two-minute slideshow of thin models or a two-minute slideshow of overweight models (larger celebrities with a BMI over 28 kg/m) depending on the condition. As predicted, body satisfaction decreased after exposure to “thin ideal” media images and increased after exposure to “overweight” media images. The findings were consistent with previous research and highlighted the degree with which the thin-ideal physique diminished the body satisfaction of individuals (Tucci & Peters, 2008). Research has found the “thin ideal” exists and is what most females compare themselves to (Tucci & Peters, 2008). The prominence of the thin ideal in the media leads women and girls to struggle with eating disorders, body satisfaction, and anti-fat stigma. Tucci and Peters’ (2008) research study is important because it focuses on how media images in magazines effect the body satisfaction of women.

Though many studies have been conducted regarding obesity in the media, weight-based stigmatization, anti-fat attitudes, and body satisfaction, little research has identified the focus on the media’s portrayal of obese individuals and corresponding effects on the body satisfaction and
self-esteem of individuals. Additionally, only a few studies have focused on the differences between the way women of different sizes and body types react to portrayals of obesity. The purpose of the current study is to assess if the way obese individuals are portrayed in advertisements affects the self-esteem and body satisfaction of people with varying degrees of body mass.
Chapter 2
Review of Literature

Social Comparison Theory

Social comparison theory explains the relationship between opinions and abilities. Developed by social psychologist Leon Festinger (1954), the social comparison theory is described as “a person’s cognition (his opinions and beliefs) about the situation in which he exists and his appraisals of what he is capable of doing (his evaluation of his abilities)” (p. 117). The comparison of one’s opinions and abilities with another’s has bearing on his or her behavior (Festinger, 1954).

Festinger (1954) hypothesized there is an innate drive in every human being to compare and evaluate opinions and abilities. According to his social comparison theory, without the capability to make a social comparison, evaluation of opinion and abilities is unstable (Festinger, 1954). Festinger (1954) theorized people primarily compare themselves to those who are most like them (a lateral comparison) and that a person will not tend to “evaluate his opinions or his abilities by comparison with others who are too divergent from himself” (p. 120). Furthermore, if there is only one divergent comparison available, a person will not have a precise self-evaluation and will refrain from strict comparison.

Foundational work in this area comes from psychologist Irving Whittemore. Working in the early part of the 20th century, he investigated lateral comparisons in his work task experiment (Whittemore, 1924). Twelve participants were recruited to perform a mechanical printing task. The participants were then rated on a scale from 1-10 based on their non-competitive or competitive work, depending on their given condition. Results indicated people did better on the task when in competition with one another, and each participant had “almost always
spontaneously selected someone whose performance was close to their own to compete against” (Festinger, 1954, p. 121). Based on these findings about lateral comparisons, the current study hypothesizes the following:

**H1:** Women with a high BMI exposed to a stigmatizing ad will have lower self-esteem and lower body satisfaction scores compared to the control group.

**Social Comparison Theory and Advertising**

Social comparison research shows extremely thin models may not be the most effective in advertising (Halliwell & Dittmar, 2004; Lennon et al., 1999; Sohn & Youn, 2013; Yu, 2014). Yu (2012) found when participants were exposed to thin ideal images they showed greater body dissatisfaction and lower advertisement effectiveness than when participants were exposed to normative, non-ideal images (Yu, 2014). Yu’s (2014) results are congruent with Sohn and Youn’s (2013) results, as they also found when participants viewed advertisements with thin, average, and overweight models, they had the most positive brand attitude and purchase intent after viewing the ad with the average model (Sohn & Youn, 2013). Other research (Halliwell & Dittmar, 2004; Lennon et al., 1999) also indicated participants rated ads with normative, average-size models as more attention grabbing and indicated higher brand purchase intentions.

**Upward Comparison**

An upward comparison is a comparison between oneself and one who is perceived as “better” (Collins, 1996). Research shows if one expects to be dissimilar to an upward target, he or she might have feelings of inferiority and experience negative self-appraisal. In contrast, if one expects to be similar to an upward target, he or she might experience feelings of greater self-worth (Collins, 1996). A number of empirical studies have investigated the topic of upward comparison in regards to its relationship with various psychological affects.
**Upward Comparison and Self-Esteem.** In Brown et al.’s (1992) study about psychological closeness and self-appraisal, one study focused on upward comparison and self-esteem. Participants were assigned to either a shared distinctiveness condition (shared birthday) or a condition with no shared distinctiveness. The participants were shown a photo of an attractive or unattractive woman and were given information about the woman in the assigned photo (e.g. her birthday). Participants were told to form an impression about the woman in the photo and then take the Texas Social Behavior Inventory (TSBI)—a scale used to measure self-esteem. Results indicated participants in the shared distinctiveness (shared birthday) condition had increased self-esteem following their upward comparison with the attractive woman in the photo. Additionally, the participants in the condition with no shared distinctiveness had no upward comparison and no change in self-esteem (Brown et al., 1992).

Consistent with Brown and colleagues’ (1992) results, van den Berg et al. (2007) found the same positive relationship between upward comparisons and self-esteem. van den Berg and colleagues’ (2007) cross-sectional study investigated how male and female media body comparisons correlated with factors such as BMI, body satisfaction, and self-esteem. Findings indicate that low self-esteem is associated with more frequent media body comparisons. It is not clear, however, the direction of the causal relationship (van den Berg et al., 2007).

Contradictory to Brown et al. (1990) and van den Berg et al. (2007), research by Salovey and Rodin (1984) claims upward comparisons have no effect on self-esteem. They performed a study about achievement and used the Rosenberg Self-Esteem scale to operationalize self-esteem. The results of their study showed a null-hypothesis, demonstrating that self-esteem and upward comparison may not be correlated at all (Salovey & Rodin, 1984). The contradicting
information regarding the relationship between upward comparisons and self-esteem indicate that more research must be done before a causal consensus can be concluded.

**Upward Comparison and Body Satisfaction.** van den Berg et al. (2007) study about upward social comparisons, self-esteem, BMI, and body satisfaction indicated a positive association between media body comparisons and body dissatisfaction. In other words, when women compare themselves to same-sex media images their body satisfaction decreases. Today’s thin ideal—which exists in the media almost exclusively—leads the majority of females to compare upward; such upward comparisons lead to negative self-evaluation of the body (van den Berg et al., 2007).

**Downward Comparison**

Wills (1981) describes downward comparison as a process in which “persons can enhance their own subjective well-being by comparing themselves with a less fortunate other” (Wills, 1981, p. 245). In other words, a downward comparison is when one evaluates oneself based on his/her comparison with one who is perceived as “worse.”

Research shows individuals that make downward comparisons about nonappearance topics are protected from the negative effects of appearance-based upward comparisons (Tiggemann & Polivy, 2010; Lew, Mann, Myers, Taylor & Bower, 2007). In Lew and colleagues’ (2007) experiment, women were told to write about nonappearance topics such as talents and friendships. Results indicate women who made nonappearance-based downward comparisons with attractive, thin models were safeguarded from negative effects, such as lower body satisfaction (Lew et al., 2007).

Furthermore, a study by Tiggemann and Polivy (2010) aimed to examine female social comparisons to thin idealized images. A sample of 114 female participants viewed fashion
advertisements with attractive, thin models. The participants were then asked to compare themselves to the models on the basis of appearance and intelligence. Results indicated appearance comparisons (upward comparisons) were positively associated with body dissatisfaction, while the intelligence comparisons (downward comparisons) were negatively associated with body dissatisfaction. However, Tiggemann and Polivy (2010) stated “if women can be induced to make social comparisons on other dimensions on which they judge themselves superior to the media images—that is, to make downward social comparisons—then these negative effects may be reversed” (p. 357).

Research shows when normative, average-bodied females are depicted in advertisements, women are more likely to compare downward (Lennon, Lil lethun & Buckland, 1999; Yu, 2014). Yu (2014) claimed “comparisons with non-idealized (or average sized) model images lead to downward comparisons, resulting in lower body dissatisfaction and more positive advertising effectiveness” (p. 155). This information is consistent with Lennon and colleagues’ (1999) results indicating women compare themselves less to thin ideal models and more to average-bodied models.

Unfortunately, little research has been done about weight-based downward comparisons, especially when in the context of advertisements with overweight or obese models. The lack of research in this area could be because of the overwhelming prevalence of the thin ideal and the fact that overweight and obese individuals are underrepresented in modern-day media. Nevertheless, the current study hypothesizes the following:

**H2:** Women with low BMI exposed to a stigmatizing ad will have higher body satisfaction and higher self-esteem than the control group.
Stigmatization of Obese Individuals

Obese individuals are treated in a stigmatized manner (Cossrow, Jeffery, & McGuire, 2001; Latner, Liberman, & Tybur, 2012; Latner, Simmonds, Rosewall, & Stunkard, 2007; Latner, Stunkard, & Wilson, 2005; Puhl, Moss-Racusin, Schwartz, & Brownell, 2008). Cossrow (2001) confirmed weight status affects social interaction and stigmatization. Participants reported obese individuals are indeed stigmatized and many are discriminated against, ridiculed, and stereotyped (Cossrow et al., 2001). A study conducted by Puhl and colleagues (2008) focused on participants in a weight-loss program. They found the majority of overweight participants had been stigmatized in some way. Three-quarters of their participants had experienced very negative incidents that consisted of being insulted, being called derogatory names, being teased or ridiculed, and being made fun of (Puhl et al., 2008).

Another interesting finding is that obesity stigma is pervasive, and every group of individuals has some sort of weight-based bias against obese individuals (Puhl et al., 2008). Research has shown the most frequent sources of obesity stigma are peers, friends, parents, other family members, strangers and even health professionals. Every race, ethnicity, weight, age, and gender is responsible for a portion of society’s stigmatization towards obese people. There is not a single group exempt from weight-based bias regarding obese individuals (Puhl et al., 2008).

Gender. Research has concluded several factors including gender, ethnicity, and age are related to obesity stigmatization (Cossrow et al., 2001; Latner et al., 2012; Latner et al., 2007; Latner et al., 2005; Puhl et al., 2008). In regards to gender, Latner et al. (2012) found men and women have very different biases towards obesity. Women, in comparison to men, have more neutral attitudes towards obese individuals on the Universal Measures of Bias attraction scale. Men, in fact, have reported more overall stigma than women (Latner et al., 2012).
Other work has shown different findings. Cossrow and colleagues’ (2001) research suggests males and females agree women are held to a thinner, leaner body standard than men. This research concluded women believe they are more accepting of obese appearances in men than men are in women. Men disagreed with this view (Cossrow et al., 2001). Latner et al. (2007) found gender differences in a different direction altogether. In Latner and colleagues’ (2007) study, extensive data showed girls are more negative than boys in their rankings of obese male figures, and boys were more negative than girls in their rankings of obese female figures.

Each of these studies regarding gender and obesity stigma contradicts the others in some way. This contradicting information proves more research must be done regarding gender and obesity stigma.

**Ethnicity.** Ethnicity is another factor that influences obesity stigma (Latner et al., 2005). Latner and colleagues (2005) suggested differences in ethnicity influence differences in biases towards obese individuals. Their objective was to assess stigmatization of obesity, relative to stigmatization of disabilities. The results indicate African-American participants show a greater liking for obese people than Caucasian participants. The same results were shown for Asians—evidencing Asians were less biased than Caucasians. Of all of the genders and ethnicity combinations, African-American women liked obese peers the most—more than African-American men, and Caucasian men and women. According to the study, these findings could be due to a greater acceptance of obesity among minorities due to the process of disidentification (Latner et al., 2005).

**Age.** Age is addressed in the Latner et al.’s (2005) study. In past studies, it was proven the stigmatization of obesity increases with age (Latner et al., 2005). This information is confirmed by a Puhl et al. (2008) study, which indicates people’s worst experiences with obesity
stigmatization occurs in adulthood and is perpetrated by adult peers (Puhl et al., 2008). However, newer research with a wider range in age indicates that children are less tolerant of obesity than adults are (Latner et al., 2005).

**Obesity in the Media**

Magazine advertisements, television shows, and billboards lack diversity when it comes to weight and body shape. According to Eyal and Te’eni-Harari (2013), the media tend to present a tinnier, thinner body size. Larger body shapes—including overweight and obese bodies—are rarely seen on television. Obese individuals are greatly underrepresented in the media. When seen on TV or in advertisements, obese men and women are usually seen in a negative or stereotypical light (Eyal & Te’eni-Harari, 2013).

Negative portrayals of overweight and obese persons are common in all forms of media, including television shows, cartoons, advertisements, and news reports (McClure et al., 2011). According to studies by McClure et al. (2011) and Eyal and Te’eni-Harari (2013), when overweight or obese individuals are on television, they are commonly characterized by negative traits and seen in social situations attracting ridicule, as compared to thinner characters in the media. Overweight characters are more often made fun of and mocked on television and are usually represented outside of romantic or sexual relationships (Eyal & Te’eni-Harari, 2013). They are also stereotyped as lazy, sloppy, unintelligent, unhappy, unattractive, and engaging in binge-eating behaviors (McClure et al., 2011). Most typically, overweight men and women are seen in the media working in current affairs, on news shows, on talk shows, and on shows discussing health (Eyal & Te’eni-Harari, 2013). McClure et al. (2011) also discovered 72 percent of images of obese men and women in news reports are stigmatizing and stereotypical.
The Media’s Impact on Body Image and Self-Esteem

Today’s media has a fixation with the thin ideal—the understanding thinness is the ultimate desired body shape (Eyal & Te’eni-Harari, 2013). Studies (Eyal & Te’eni-Harari, 2013; Ura & Preston, 2015; Veldhuis, Konijn, & van der Veen, 2011) have found exposure to media presenting the thin ideal leads to increases in body dissatisfaction, anger, depression, and low self-esteem in women, as compared to exposure to media content that depicts models with average or overweight body shapes. Grabe, Ward, and Hyde (2008) found exposure to the thin ideal in the media influenced women in many negative ways. Other research suggests the degree of internalization of thin ideal images in the media was a crucial element that contributed to the development of eating disorders and negative body image (Grabe, Ward, & Hyde, 2008). This research suggests the thin ideal in the media can be detrimental to women physically and psychologically.

A study conducted by Eyal and Te’eni-Harari (2013) aimed to examine the relationship between media exposure and body image. Participants were asked to indicate, on average, the amount of hours they spend watching TV, playing videogames, or scrolling through the Internet (Eyal & Te’eni-Harari, 2013). Results indicated there was a significant correlation between media exposure and body image perceptions (Eyal & Te’eni-Harari, 2013). Thus, the more media exposure one received, the more negative his or her perception of his or her body (Eyal & Te’eni-Harari, 2013).

A meta-analysis of media content exposure stated the thin ideal effects are greater among women who are 19-years or younger (Grabe et al., 2008). Female adolescents are prone to internalizing normative media images of the female body, and because the thin ideal is today’s “norm” in the media, adolescent females are internalizing this standard. According to Steinberg
and Morris (2001), adolescents are more susceptible to the internalization of the thin ideal because they are at an impressionable time in their lives (Steinberg & Morris, 2001). Young women are highly disposed to evaluating their environment and trying to conform (Grabe et al., 2008). Because the media’s ideal weight and shape is unattainable for the majority of women, young women are becoming more and more at risk for developing body-related disturbances (Veldhuis et al., 2011).

The labeling of images also can also elicit body dissatisfaction. A study done by Veldhuis (2010) found girls who are exposed to thin images with a thin label report less body dissatisfaction that girls who saw the thin body with a normal weight label. These results indicate that body dissatisfaction may be based on how normal or abnormal a media image is seen or labeled by peers (Veldhuis et al., 2011).

Appearance Schematicity. An appearance schema is various cognitions about attractiveness or appearance that establish the processing of self-related evidence about one’s appearance (Veldhuis et al., 2011). According to Veldhuis et al.’s (2011) review of past literature, studies have shown appearance schematicity is a predictor of self-esteem and body satisfaction. Women who are high in appearance schematicity—or invest a lot of time and energy into their appearance—are more susceptible to the media’s negative effects. Likewise, women who are low in appearance schematicity have higher body satisfaction after exposure to thin ideal media (Veldhuis et al., 2011). Veldhuis and colleaues’ (2011) research indicates the higher girls are in appearance schematicity the higher their levels of body shame and awareness.

Internalization. Internalization is defined as “the acceptance of specific cultural values to the point that they become incorporated into one’s own principles” (Ura & Preston, 2015, p. 16). Thinness, due to its normalization in the media, is acknowledged and internalized into the
sociocultural principles of many female’s beliefs systems. Unfortunately, the majority of women will never be able to reach the ideal body images that the media portrays; therefore, women perceive their bodies negatively when comparing their bodies to the thin ideal bodies in the media (Ura & Preston, 2015). Studies (Grabe et al., 2008; Ura & Preston, 2015) have shown there is a positive, significant relationship between thin-ideal body internalization and low self-esteem and body dissatisfaction. This implies women who internalize thin-ideal media content risk basing their sense of self off their body shape and weight (Ura & Preston, 2015).

**BMI and its Relationship with Self-Esteem and Body Dissatisfaction**

Research has found body mass (BMI) and self-esteem are related to one another (Kinnally & Van Vonderen, 2012). According to Kinnally and Van Vonderen’s (2012) study, women with higher BMI have lower self-esteem. A meta-analysis conducted by Miller and Downey (1999) validates this connection, stating overweight individuals are stigmatized by the media, peers and other social sources, which contributes to feelings of “falling short” and lowered self-esteem (Miller & Downey, 1999). Furthermore, their findings suggest the relationship between low self-esteem and being overweight actually has less to do with actual weight and more-so to do with feelings of being overweight (Miller & Downey, 1999).

In addition, women with a higher BMI are also more dissatisfied with their bodies (Kinnally & Van Vonderen, 2012; Mond, 2012). Kinnally and Van Vonderen’s (2012) research notes that body dissatisfaction can have a high correlation with low self-esteem, as does a study done by Mond (2012). Mond’s (2012) study showed an inverse relationship between self-esteem and body dissatisfaction. He found the higher one’s self-esteem, the lower one’s body dissatisfaction. Moreover, his research shows the higher a female’s BMI levels are, the greater
body dissatisfaction she will have (Mond, 2012). Based on these findings, the current study hypothesizes the following:

**H3:** Those exposed to a non-stigmatizing ad, will have higher self-esteem and higher body satisfaction compared to the control group.
Chapter 3
Methodology

The purpose of this study was to examine how the portrayal of obese individuals in advertisements (stigmatizing, non-stigmatizing) impact self-esteem and body satisfaction of women with varying degrees of BMI.

Design

This study was a 2 (BMI: High and Average/Low) X 3 (media portrayal: stigmatizing, non-stigmatizing, control) between-subjects, factorial with control group design, with body satisfaction and self-esteem scores as the dependent variable. A randomized experiment was distributed online using Amazon’s Mechanical Turk. An ad depicting an obese model holding donuts was created to exemplify the stigmatization of overweight and obese individuals in the media (n = 33). An ad depicting an obese model holding an apple was created to exemplify a non-stigmatizing advertisement (n = 31).

Participants

Participants were recruited from Amazon’s Mechanical Turk. All participants were female, 18 years of age or older, and living in the United States (N = 98). The average age was 37.77 with a standard deviation of 12.02, and a range of 20 to 66 years of age.

Procedures

A “hit” was published on Amazon’s Mechanical Turk. Once the “hit” was published, women over the age of 18 whom live in the United States completed the survey for a payment of $0.50. After consenting to take the survey (Appendix A), participants indicated their height and weight for BMI calculations. Participants were randomly assigned to view a non-stigmatizing advertisement (n = 31), a stigmatizing ad of an obese woman (n = 33), or a not be exposed to an
ad \((n = 34)\). All participants completed the body satisfaction scale and the Rosenberg self-esteem scale.

**Stimuli**

Two print advertisements were created, one of which was stigmatizing and the other of which was non-stigmatizing (Appendix B).

**Pilot Test.** The stimuli were pretested with a convenience sample \((N = 130)\) to determine if the stigmatized ad differed from the non-stigmatized ad, and participants could tell the difference. Participants viewing the stigmatized advertisement \((n = 75, 85.33\%)\) accurately identified the manipulation. Participants viewing the non-stigmatizing advertisement \((n = 55, 85.45\%)\) accurately identified the manipulation.

**Independent Variables**

**Condition.** Participants were assigned to one of the two conditions – experimental or control. Those in the experimental condition randomly saw one of the two advertisements. The participants in the control group just answered scale measures without being exposed to an ad.

**BMI.** Body mass (BMI) was calculated using participants’ height and weight. BMI is a well-known and frequently used measure that physicians use to determine health ("BMI Calculator," 2016). Experts consider a BMI below 20 to be underweight, a BMI of 20-24.99 to be healthy, a BMI of 25-30 to be overweight and a BMI over 30 to be obese ("BMI Calculator," 2016). The mean BMI for the present study was 26.84 with a standard deviation of 6.8 and a range of 17.04 to 48.12. Tess Holliday, the model depicted in the present study’s advertisements (in either a stigmatizing or non-stigmatizing way), has a BMI of 42.9 (Fogarty, 2015).
Dependent Variables

**Body Satisfaction.** The dependent variable, body satisfaction, was measured using the body satisfaction scale (BSS)—a frequently used scale for assessing eating disorders (Slade, Dewey, Newton, Brodie, & Kiemle, 1990). The body satisfaction scale has 16 items and is a self-report questionnaire that measures body dissatisfaction (Slade et al., 1990). The scale rates 16 body parts on a seven-point scale ranging from “very satisfied” to “very dissatisfied” (Slade et al., 1990, see Appendix C). The 16 body parts included in the scale were: head, face, jaw, teeth, nose, mouth, eyes, ears, shoulders, neck, chest, tummy, arms, hands, legs, and feet ($\alpha = .94; M = 3.20, SD = 1.27$) (Slade et al., 1990).

**Self-Esteem.** The dependent variable, self-esteem, will be measured using Rosenberg’s self-esteem scale (Rosenberg, 1965, see Appendix C). The self-esteem scale has 10 items that measure self-worth by assessing positive and negative feelings about the self (Rosenberg, 1965). The scale is said to be uni-dimensional and rates all answers on a 4-point Likert scale ranging from “strongly agree” to “strongly disagree” (Rosenberg, 1965). The 10 questions in the scale are: I feel that I am a person of worth, at least on an equal plane with others; I feel that I have a number of good qualities; All in all, I am inclined to feel that I am a failure; I am able to do things as well as most other people; I feel I do not have much to be proud of; I take a positive attitude toward myself; On the whole, I am satisfied with myself; I wish I could have more respect for myself; I certainly feel useless at times; At times I think I am no good at all ($\alpha = .94; M = 2.06, SD = .71$) (Rosenberg, 1965).
Chapter 4

Results

A 2 x 3 multivariate analysis of variance (MANOVA) with BMI (high and average) and ad (stigmatizing/non-stigmatizing/control group) as independent variables was used to assess Hypothesis 1, 2, and Hypothesis 3. The omnibus test found significant differences for the independent variable, BMI, Wilks’ $\lambda = .94$, $F(2, 94) = 4.32$, $p = .01$, partial $\eta^2 = .08$. The omnibus test did not find significant differences for condition, Wilks’s $\lambda = .95$, $F(2, 94) = 2.34$, $p = .10$, partial $\eta^2 = .05$.

Hypothesis 1 predicted women in with a higher BMI exposed to a stigmatizing ad would have lower self-esteem and body satisfaction than the control group. Subsequent univariate tests revealed significant differences for the independent variable BMI on the dependent variables: body satisfaction $F(1, 97) = 7.85$, $p = .01$, $\eta^2 = .08$, and self-esteem $F(1, 97) = 4.28$, $p = .04$, $\eta^2 = .04$. When examining the mean scores across conditions, participants with a higher BMI viewing a stigmatized ad indicated lower self-esteem ($M = 2.03$, $SD = .57$) than the control group ($M = 2.10$, $SD = .73$). When examining the differences for body satisfaction, those with a higher BMI viewing a stigmatized ad scored the same as ($M = 3.31$, $SD = 1.25$) the control group ($M = 3.31$, $SD = 1.16$). Therefore, Hypothesis 1 was partially supported. Those viewing a stigmatized ad did indicate lower self-esteem but had the same body satisfaction compared to the control group.

Hypothesis 2 predicted women with a lower BMI exposed to a stigmatizing ad would have higher self-esteem and body satisfaction than the control group. When examining the mean scores across conditions, participants with a lower BMI viewing a stigmatized ad indicated lower self-esteem ($M = 1.90$, $SD = .72$) than the control group ($M = 2.10$, $SD = .73$). When examining
the differences for body satisfaction, those with a lower BMI viewing a stigmatized ad scored lower ($M = 2.60, SD = 1.30$) than the control group ($M = 3.31, SD = 1.16$). This indicates they had lower self-esteem but were more satisfied with their body. Therefore, Hypothesis 2 was partially supported. Those viewing a stigmatized ad did indicate lower self-esteem, but they had higher body satisfaction compared to the control group.

Hypothesis 3 predicted those exposed to a non-stigmatized ad would have higher self-esteem and body satisfaction than those in the control group. When examining the pattern of means, those in the non-stigmatized group indicated the same level of ($M = 2.11, SD = .78$) as those in the control group ($M = 2.13, SD = .73$). They also indicated the same level of body satisfaction ($M = 3.34, SD = 1.37$) as those in the control group ($M = 3.32, SD = 1.15$). Therefore, Hypothesis 3 was not supported. There were no differences between those viewing a non-stigmatized ad or the control group. Tables 1 and 2 present the means and standard deviations for the independent and dependent variables.
Table 1: Scores for Dependent Variables Based on Advertisement Type

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Stigmatizing</th>
<th>Non-stigmatizing</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Esteem</td>
<td>1.95 (.65)</td>
<td>2.11 (.77)</td>
<td>2.12 (.73)</td>
</tr>
<tr>
<td>Body Dissatisfaction</td>
<td>2.94 (1.29)</td>
<td>3.34 (1.37)</td>
<td>3.32 (1.15)</td>
</tr>
</tbody>
</table>

Note: Means and standard deviations (listed in parentheses) can be found in this table. Self-esteem was measured using Rosenberg’s Self-Esteem Scale (Rosenberg, 1965). Body dissatisfaction was measured using the Body Dissatisfaction Scale (Slade et al., 1990).

Table 2: Scores for Dependent Variables Based on BMI

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Low BMI</th>
<th>High BMI</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Esteem</td>
<td>1.89 (.66)</td>
<td>2.16 (.71)</td>
<td>2.14 (.76)</td>
</tr>
<tr>
<td>Body Dissatisfaction</td>
<td>2.78 (1.30)</td>
<td>3.52 (1.26)</td>
<td>3.34 (1.16)</td>
</tr>
</tbody>
</table>

Note: Means and standard deviations (listed in parentheses) can be found in this table. Self-esteem was measured using Rosenberg’s Self-Esteem Scale (Rosenberg, 1965). Body dissatisfaction was measured using the Body Dissatisfaction Scale (Slade et al., 1990).
Chapter 5

Discussion

The purpose of the current study is to assess if the way obese individuals are portrayed in advertisements effects the self-esteem and body satisfaction of people with varying degrees of body mass.

Hypothesis 1 stated women with a higher BMI exposed to a stigmatizing ad would have lower self-esteem and body satisfaction than the control group. Hypothesis 1 was partially supported. Results indicated those viewing a stigmatized ad had lower self-esteem but had the same body satisfaction when compared to the control group. These findings were significant. The results for self-esteem are in accordance with research on downward comparisons (Lennon et al., 1999; Yu, 2014). Women partake in downward comparisons to boost self-esteem (Lennon et al., 1999; Yu, 2014). The results for body dissatisfaction are in alignment with Festinger’s (1952) social comparison theory. Festinger (1952) and Whittemore (1924) pointed out people most often partake in lateral comparisons—comparisons with people who seem most similar to the self (Festinger, 1952; Whittemore, 1924). If participants made a lateral comparison with the stigmatized model in the advertisement, it would make sense that their body satisfaction levels would be the same.

Hypothesis 2 stated women with a lower BMI exposed to a stigmatizing ad would have higher self-esteem and body satisfaction than the control group. Hypothesis 2 was partially supported. Results indicated that those viewing a stigmatized ad indicated lower self-esteem and higher body satisfaction than the control group. The results for body satisfaction are in accordance with research on downward comparisons, but are inconsistent with research on self-esteem (Lennon et al., 1999; Yu, 2014). The average age of participants in this study is older
than most of the past research. The current study did not rely on a convenience sample of college-aged students, but rather more mature women. One could argue when the average age of the participants is 37.77, they are more sure of themselves and may be less susceptible to the influence of the media.

Hypothesis 3 stated women exposed to a non-stigmatized ad would have higher self-esteem and body satisfaction than those in the control group. Hypothesis 3 was not supported. Results indicated those in the non-stigmatized group had the same level of self-esteem and body satisfaction as those in the control group. In other words, there were no differences between those viewing a non-stigmatized ad and the control group. Based on these outcomes, it is possible participants with higher BMI made a lateral comparison with the model in the advertisement, thus keeping their self-esteem and body satisfaction the same. Additionally, it is possible that participants with lower BMI did not compare themselves to the non-stigmatizing model due to the comparison being too divergent. Festinger’s (1954) social comparison theory does indicate that if a comparison is too far-fetched, a person will refrain from comparison and will not self-evaluate. It would make sense women with lower BMI did not have changes in self-esteem or body satisfaction between the non-stigmatizing and control conditions.

Limitations

The primary limitation of the study is the small sample size. Though 30 participants per condition is usually an acceptable sample size for difference conditions, there were not enough participants to prove statistical significance in some cases. With 20 more participants in each condition, there may have been enough power to prove significance for each hypothesis.

Another limitation is not employing multiple messages. In most experimental research examining message effects, researchers tend to employ multiple messages in each condition.
Two stigmatizing ads and two non-stigmatizing ads could have been prepared. Also, the control condition did not view any type of message. Participants also did not indicate their exposure to different types of media. Media exposure could have been used as a covariate in order to make sure this did not impact body satisfaction scores.

**Future Research**

To remove any limitations from the present study, future studies could have larger sample sizes with a greater age-range. Additionally, it would be interesting to take into account the ethnicity of the participants. Literature review shows that people of different ethnicities are more or less biased towards obese individuals. It would be beneficial to know which ethnicities have the most self-esteem and body dissatisfaction affects after viewing an advertisement with an obese model matching or not matching their ethnicity.

**Practical Implications**

Many studies have been conducted regarding obesity in the media, but minimal to no studies have focused on the media’s portrayal of obese individuals and its corresponding effects on the body satisfaction and self-esteem of women with varying degrees of BMI. As media increases the presence of people with high BMI in programming (e.g., Mike & Molly, American Housewife), it is important to realize that those characterizations may have real-world effects. By taking BMI into consideration, the current study explores how high and low BMI can impact the degree to which women’s self-esteem and body dissatisfaction changes after viewing a stigmatizing or non-stigmatizing ad. The results of this study reveal stigmatizing advertisements have a negative effect on the self-esteem of high BMI individuals, and a positive effect on the body satisfaction of low BMI individuals. This indicates downward and upward social
comparisons are prevalent and can prevent and possibly cause negative changes in psychological wellbeing.

The average BMI and prevalence of weight-stigma have increased dramatically in the past couple of years, it is important for advertisers to take into consideration how they are depicting their models—especially in cases where the depiction could be construed as stigmatizing. Furthermore, it is important for people to understand the negative affects that stigmatization in the media can have on women with varying body mass.
Appendix A

(IRB Approval)

EXEMPTION DETERMINATION

Date: March 13, 2017
From: Stephanie Krout, IRB Analyst
To: Brooke Stafford

<table>
<thead>
<tr>
<th>Type of Submission:</th>
<th>Initial Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of Study:</td>
<td>EXAMINING HOW THE MEDIAS PORTRAYAL OF OBESE INDIVIDUALS EFFECTS BODY SATISFACTION AND SELF-ESTEEM</td>
</tr>
<tr>
<td>Principal Investigator:</td>
<td>Brooke Stafford</td>
</tr>
<tr>
<td>Study ID:</td>
<td>STUDY00006823</td>
</tr>
<tr>
<td>Submission ID:</td>
<td>STUDY00006823</td>
</tr>
<tr>
<td>Funding:</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Documents Approved:
- Body Satisfaction Scale (0.01), Category: Data Collection Instrument
- Brooke Stafford - 591 (03/09/2017), Category: IRB Protocol
- Non-stigmatizing Advertisement (03/11/2017), Category: Data Collection Instrument
- Rosenberg's Self-esteem Scale (1965) (0.01), Category: Data Collection Instrument
- Stigmatizing Advertisement (03/11/2017), Category: Data Collection Instrument

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are not required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

Penn State researchers are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within CATS IRB (http://irb.psu.edu).

This correspondence should be maintained with your records.
Appendix B

(Ads Used)

Bad Choices. Bad Health.

Have self control when it comes to junk food.
Don’t load up on fast food and sweets; instead, eat fresh fruits and vegetables.

Poor food choices can cause obesity.

Good Choices. Good Health.

Have self control when it comes to junk food.
Don’t load up on fast food and sweets; instead, eat fresh fruits and vegetables.

Good food choices combats bad health.
Appendix C

(Scales Used)

Body Satisfaction Scale (1990)
*Please answer the following questions about how satisfied you are with your body.*

<table>
<thead>
<tr>
<th>Very Satisfied</th>
<th>Very Unsatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  2  3  4  5  6  7</td>
<td></td>
</tr>
</tbody>
</table>

Head
Face
Jaw
Teeth
Nose
Mouth
Eyes
Ears
Shoulders
Neck
Chest
Tummy
Arms
Hands
Legs
Feet

Rosenburg’s Self-esteem Scale (1965)
*Please answer the following questions about your self-esteem.*

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  2  3  4</td>
<td></td>
</tr>
</tbody>
</table>

I feel that I am a person of worth, at least on an equal plane with others.
I feel that I have a number of good qualities.
All in all, I am inclined to feel that I am a failure.
I am able to do things as well as most other people.
I feel I do not have much to be proud of.
I take a positive attitude toward myself.
On the whole, I am satisfied with myself.
I wish I could have more respect for myself.
I certainly feel useless at times.
At times I think I am no good at all.
REFERENCES


*BMI Calculator.* (2016). Retrieved from


Academic Vita
Brooke Stafford
BrookeStafford17@gmail.com

EDUCATION:
THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE, UNIVERSITY PARK, PA
B.A. in Public Relations, May 2017
B.A. in Psychology, May 2017
Minor in International Studies

PROFESSIONAL EXPERIENCE:
HAWKINS INTERNATIONAL PUBLIC RELATIONS
Public Relations Intern
NEW YORK, NY
SUMMER 2017
Supervisor: Hannah Redfield
- Created and pitched press releases
- Used Cision to create market-specific media lists
- Prepared detailed itineraries for journalists and clients
- Communicated with esteemed journalists at top travel and lifestyle publications

FINSBURY
Digital Marketing Intern
NEW YORK, NY
SUMMER 2017
Supervisor: Ana Villarreal
- Created social media how-to documents for agency and client use
- Edited speeches and press releases
- Assisted in media monitoring
- Created an industry-specific database of journalists’ and influencers’ Twitter handles

THE COLLEGE TOURIST
Social Media and Content Intern
NEW YORK, NY
FALL 2016 – FALL 2017
Supervisor: Alison Tatham
- Managed a travel blogging network of 25 ambassadors
- Tracked blogger progress and article statistics
- Updated the newsletter on MailChimp
- Wrote blog posts and lead Twitter chats
- Acted as a liaison between the founder and the bloggers

SHES SOMEBODYS DAUGHTER
Social Media Associate
HARRISBURG, PA
SPRING 2015 – WINTER 2016
Supervisor: Tammy Stauffer
- Updated the Facebook and Twitter accounts daily
- Designed and mailed newsletters
- Assisted in research

LEADERSHIP & VOLUNTEER EXPERIENCE:
THE DAILY COLLEGIAN
Senior Designer (2013-2015)

ALPHA XI DELTA SORORITY
Marketing Chair (2013-2014)

IFC/PANHELLENIC DANCE MARATHON (THON)

AUTISM SPEAKS
Volunteer through Alpha Xi Delta (2014-2017)

CENTRE COUNTY PAWS
Volunteer (2016-2017)

HONORS & AWARDS:
Kappa Tau Alpha
Lesher Scholarship