Effects of Media Use on College Students’ Eating Behaviors and Body Image

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EFFECTS OF MEDIA USE ON COLLEGE STUDENTS’ EATING

BEHAVIORS AND BODY IMAGE

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ABSTRACT

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Eating disorders are on the rise, especially among adolescents. As exposure to mass media is also increasing among all ages, much research has explored the links among media exposure, individual eating behaviors, and the ways in people view their own bodies. This thesis describes and analyzes correlations between mass media exposure and the development of eating disorder symptomology. Eating disorders are defined, and mass media’s influences on body image and self-esteem are discussed as the foundation for several hypotheses and a research question regarding the effects of media exposure on eating behaviors and body image. A quasi-experiment and a self-questionnaire were administered to 100 college students in exchange for extra credit through particular courses. Although most hypotheses were not supported or only partially supported at the level of statistical significance, an interesting positive correlation emerged between self-reported exposure to fashion magazines and self-reported binge-eating, which is known to be an indirect indicator of food deprivation in one’s past.

KEYWORDS: Eating disorders, media, body image, fashion magazines, binge-eating
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Introduction

Eating disorders have been plaguing U.S. adolescents for decades. While they may arise from a variety of different causes, studies suggest that they stem from negative body image, which has been found to correlate with mass media exposure. The media industry has established its own definition of what should be normal, a standard that exerts pressure on society and, in particular, on adolescents to fit a particular clothing size and body weight in order to be considered beautiful. If we deviate from the thin and beautiful images in most mediated content, we are made to feel that we fall short of the established standard and we must do something to change that. As a result, the media can often affect one’s attitude towards eating, leading to dieting, and a desire to achieve a certain look. These influences can occur even if an individual is not aware of them (Bandura, 2002). The media have become important figures to which many people look up and from which they seek advice (National Eating Disorders Association, 2013).

Much research shows that the mass media has created a “thin-ideal”, particularly for females by promoting slender images and offering directions for achieving an ideal (thin) body (National Eating Disorders Association, 2013; Levine, 2009; Klein & Shiffman, 2006; Fouts & Burggraf, 2000; Dohnt & Tiggemann, 2006; Harrison, 2000; Bessenoff, 2006; Spettigue & Henderson, 2004). The purpose of the research is to discuss and demonstrate how excessive exposure to certain types of media content may lead to unhealthy eating habits, which may in turn have the potential to lead to an eating disorder. Specifically, the goal is to observe how reactions to images of extremely thin versus normal-weight individuals might correlate with participants’ exposure to magazines, as well as their dieting and exercise behaviors.
CHAPTER ONE: DEFINING AND CONTEXTUALIZING EATING DISORDERS

Dieting has become a normal and accepted way of life in our nation. It has become so prevalent and popular that it would be safe to say that most people either know someone who has dieted at some point, or have dieted themselves. What is especially alarming is that young children and adolescents have begun to pick up on these behaviors at shockingly young ages. The behaviors leading to eating disorders are increasing: 40-60% of girls in high school, 13% of girls in high school purge, and 30-40% of girls in junior high are concerned about their weight (Eating Disorders Coalition, 2013). The Eating Disorders Coalition notes that eating disorders have been diagnosed in children as young as 7. Alarmingly, 40% of girls of the 9-year-old girls have dieted, and there are even 5-year-old girls who are worried about dieting (Eating Disorders Coalition). Due to the excessive influence of dieting on our society, issues such as eating disorders are becoming more and more prevalent. It is important to be aware of when dieting can become so extreme that it manifests pathology.

There are several different types of eating disorders. For the purpose of this research, anorexia nervosa, bulimia nervosa, and the so-called eating disorders not otherwise specified, or EDNOS, will be discussed. Other conditions such as obesity could also be linked to an eating disorder, if an individual binges or ingests high-calorie foods. However, the intent of this research is to remain focused on eating disorders geared toward losing weight and maintaining a “thin” image. Each of these disorders will be explained in the following subsections.
**Anorexia Nervosa**

The National Institute of Health defines anorexia nervosa as “an eating disorder that makes people lose more weight than is considered healthy for their age and height” (MedlinePlus, 2013). People with anorexia nervosa have a significant fear of being overweight, regardless of their actual weight. These patients take drastic measures, such as over-exercising and extreme dieting, to maintain a minimal weight. To receive an anorexia nervosa diagnosis, an individual must meet the following criteria (MedlinePlus):

- Have an intense fear of gaining weight or becoming fat, even when s/he is underweight;
- Refuse to keep weight at what is considered normal for his or her age and height (15% or more below the normal weight);
- Have a body image that is very distorted, be very focused on body weight or shape, and refuse to admit the seriousness of weight loss;
- Have not had a period for three or more cycles (in women).

Typical behaviors that anorexic patients may display include: “playing” around with food (cutting it into small pieces or moving them around to delay eating); excessive exercise all of the time; bathroom trips immediately after eating; avoidance of eating in the presence of others; and using diuretics, laxatives, or appetite suppressants (MedlinePlus).

Diagnosing anorexia typically includes a thorough review of one’s medical history, a patient exam, and a multitude of blood tests to measure albumin, complete blood count (CBC), electrolyte levels, kidney function, liver function, thyroid function, etc. These tests are performed to determine possible causes and effects of the weight loss. Once a patient has been diagnosed, successful treatment depends on the patient’s
acceptance of the diagnosis. This is followed by the establishment of goals to return to a healthy weight and lifestyle. If anorexia remains un-treated, it can lead to weakening of the bones, lower numbers of white blood cells, low potassium levels, dehydration, malnutrition, seizures, thyroid gland issues, tooth decay, and even death (MedlinePlus, 2013).

**Bulimia**

Bulimia has been defined as “an illness in which a person binges on food or has regular episodes of overeating and feels a loss of control” (MedlinePlus, 2013). This disorder is often characterized by the excessive use of laxatives or other methods to induce vomiting. Patients often feel a sense of guilt and try to keep their purging habit secret from friends and family. Normal, and even high-calorie foods may be eaten in the hopes of disguising one’s problem. After that, the patient vomits, uses laxatives or diuretics, purges through enemas, or exercises to the extreme. Often, bulimia patients maintain a normal weight, but have a distorted self-image that makes them feel overweight. Since they may maintain a normal body size, friends and family may never suspect their eating disorder (MedlinePlus).

Diagnosing bulimia is often difficult, but there are quite a few physical indicators that facilitate the diagnosis. Symptoms include severe cavities or gum infections due to acid exposure from vomiting, as well as broken blood vessels in the eyes, also due to vomiting (MedlinePlus, 2013). Hands or knuckles may appear to be callused or scarred due to inducing vomiting. Puffy cheeks and facial appearance can be caused by vomiting as well (Smith & Segal, 2013). Dehydration may also occur, as well as an imbalance in blood electrolyte levels (MedlinePlus). Treatment is individualized; other conditions
may co-exist with bulimia, such as anorexia or depression, which could require a hospital stay. Support groups, cognitive-behavioral therapy, nutritional therapy, and antidepressants may be included in the treatment; relapse is relatively common if patients do not receive enough support (MedlinePlus).

**EDNOS**

There are instances in which an individual may display symptoms of both anorexia and bulimia, but they may not be sufficient for the diagnosis of either disorder. In this case, the diagnosis may be “eating disorder not otherwise specified”, or EDNOS. Examples of this include: purging disorder, binge-eating disorder, meeting all but one diagnostic criterion for either anorexia or bulimia, and chewing then spitting out food, rather than swallowing it (National Alliance on Mental Illness, 2013). Symptoms, diagnosis, and treatment are fairly similar to those for anorexia and bulimia, and are thus individualized for each patient (MedlinePlus, 2013).

Treating eating disorders can be complicated by the fact that they often co-exist with other medical conditions, such as psychiatric disorders. For instance, individuals who have an eating disorder are four times more likely to suffer from alcoholism or some other form of substance abuse than people in the general population (National Eating Disorders Association, 2013). Other conditions that typically co-occur with eating disorders include depression, mood disorders, and obsessive-compulsive disorder (National Eating Disorders Association).

In the United States alone, there are approximately 14 million Americans who are suffering from some form of an eating disorder (Eating Disorders Coalition, 2013). This means that approximately 4.4% of the U.S. population has an eating disorder and about
half of nation’s citizens know someone who suffers from an eating disorder (Eating Disorders Coalition). Eating disorders can target anyone: men, women, children, and people of all ages, cultures, and socioeconomic status.

Eating disorders have a large impact on the community. They have the highest mortality rate of all mental illnesses (National Association of Anorexia Nervosa and Associated Disorders, 2013). Anorexia nervosa has a higher rate of mortality among 15-24-year-old females by about 12 times compared with all other causes of death in that age group (National Eating Disorders Association). It is also listed as the third-most common chronic illness among adolescents (Eating Disorders Coalition, 2013). Aside from the worst-case scenario of death, eating disorders can lead to other serious health problems, such as cardiac arrhythmia, cognitive impairment, osteoporosis, and infertility (Eating Disorders Coalition). Eating disorders also have mental and emotional effects, often leading to social isolation and sometimes even depression (Eating Disorders Coalition). These issues affect not only the patient, but also his or her family, friends, and community. Throughout the entirety of an eating disorder illness, severe anxiety, depression, and suicide are fairly common (Eating Disorders Coalition).

Eating disorders are costly. The cost of treatment in the United States varies, from $500 to $2,000 per day (Eating Disorders Coalition, 2013). For certain outpatient treatments, such as therapy and monitoring, costs can exceed $100,000 (Eating Disorders Coalition). Relapse is also fairly common among patients with eating disorders, which increases the costs of treatment due to the need for repeated use of expensive procedures and treatments (Eating Disorders Coalition). Only about a third of patients recover after
their first episode; another third stagger back and forth between recovery and relapsing; and the last third continue to decline (Eating Disorders Coalition).

Surprisingly, even though eating disorders are a huge problem for the health of American people, they do not seem to be a research priority, at least not in terms of spending money on research. Research from 2011 concludes there are about 30 million eating disorders sufferers (suffering at any point in their life) in the United States, compared to the 5.1 million Alzheimer’s patients, 3.6 million autism patients, and 3.4 million schizophrenia patients (National Eating Disorders Association, 2013). However, the National Institutes of Health spent only $28 million on eating disorders research, compared to $450 million spent on Alzheimer’s research, $160 million on autism research, and $276 million on schizophrenia research (National Eating Disorders Association).
CHAPTER TWO: DEFINING AND CONTEXTUALIZING MEDIA EXPOSURE

The Oxford English Dictionary defines media as “the main means of mass communication, esp. newspapers, radio, and television, working for organizations engaged in such communication” (“Media”, 2013). Some of the most common forms of media include the Internet, newspapers, magazines, television, movies, books, radio, pamphlets, posters, and billboards, among others.

Thanks to new digital technologies, including tablets and smartphones, media are increasingly present and thus increasingly influential in people’s lives. The Bureau of Labor Statistics found that, for people ages 15 and older the two most time consuming ways to use media in the United States in 2011 were watching television and movies (Bureau of Labor Statistics, 2011). Specifically, TV consumed an average of 3.5 hours a day, while movies took an average of 2.4 hours of an average person’s time (Bureau of Labor Statistics). On a normal day, an average of 78% of the population viewed some form of television (Bureau of Labor Statistics). Other typical categories of media exposure included listening to radio, reading for personal interest, computer use for leisure, telephone calls, and household/personal emails and messages (Bureau of Labor Statistics).

While people of all ages spend a considerable amount of time watching TV, this is especially prevalent among adolescents. Teen Futures Media Network, based out of the College of Education at the University of Washington, states that “adolescents aged 9-14 spend over 20 percent of waking hours watching television, compared to 9 percent on hobbies and 3.5 percent on homework” (Teen Health and the Media, 2013). This exposure to television often leads to unhealthy behavior, such as eating junk food and
reducing or eliminating exercise from one’s daily routine. The average American teenager watches about 20 hours of television a week, and has been exposed to more than 350,000 hours of TV time by the age of 18 (Teen Health and the Media).

**Media Effects on Body Image**

Media exposure can make adolescents highly cognizant of the need to be popular by sending mixed messages that often affect girls and women the most. Teenagers are bombarded with TV and magazine advertisements for fast food and these advertisements show only thin and “perfect” models, suggesting that fast food is not unhealthy (National Eating Disorders Association, 2013). This can be very confusing and frustrating, as most people cannot eat junk and fast food, and remain thin and/or healthy. Such mixed messages create much anxiety; approximately “81% of 10-year-olds are afraid of being fat and between 5-10 million girls and women and 1 million boys and men are struggling with eating disorders including anorexia, bulimia, binge eating disorder, or borderline conditions” (National Eating Disorders Association).

In the United States alone, it is estimated that about 20 million women and 10 million men have or will suffer from an eating disorder at some point in their lives (National Eating Disorders Association, 2013). Twice as many women suffer from eating disorders, perhaps because men strive for muscularity and masculinity rather than being thin. The National Eating Disorders Association found that men typically appear to be more comfortable with their weight and are under less pressure to be thin, compared to women. Also, media content geared towards men differs greatly from that geared towards women. Men tend to watch and read sports, automotive, and outdoor magazines, while women’s magazines are typically focused on fashion, fitness, and appearance.
enhancement. Some may never seek treatment, because they lack awareness, deny the existence of eating disorders, or feel too embarrassed to seek assistance. Even those who do not suffer from diagnosable eating disorders may be dissatisfied with their bodies. Girls as young as 6 have started to show weight concerns and more than half of girls in elementary school are concerned about their weight (National Eating Disorders Association). As children grow up, their fears about weight may lead to an eating disorder in order to maintain the desired weight.

Eating disorders have been on the rise for the last 70 years, a period that coincides with the rise of people’s exposure to various types of mediated content, starting with radio and early movies in the first decades of the 20th century and escalating with television’s entrance into most households by the 1960s. According to the Public Broadcasting Service, 90% of U.S. households owned a television set in 1960 (PBS, 2009). Bulimia has tripled in the age group of 10- to 39-year-old girls and women, just between the years of 1988 and 1993 (National Eating Disorders Association, 2013).

Throughout the 20th century, much research has been done concerning the images found in Playboy, the Miss America pageant, and other fashion models. Several studies found that throughout the years, there was an increase in the thinness of the models, while at the same time the weight of American and Canadian women was increasing (i.e., Spettigue & Henderson, 2004). The Miss America pageant is one example of a televised event that many adolescent girls enjoy, as they look at all the beautiful contestants and aspire to look beautiful themselves. However, few realize that the event does not represent the vast majority of women, considering that “the average American woman is 5’4” tall and weighs 165 pounds, while the average Miss America winner is 5’7” tall and
weighs 121 pounds (National Eating Disorders Association, 2013). However, it is important to note that the average American woman’s BMI, 28.3, is not within the “normal” range, as classified by the World Health Organization (WHO, 2014). A normal BMI, as classified by the WHO, is in the range between 18.5 and 24.9. The average Miss America winner had a BMI of 22 in the 1920s, and that has decreased to an average BMI of 16.9 in the 2000s (National Eating Disorders Association). The importance of noting the average and model’s BMIs is to emphasize that even though the average BMI may not be healthy, the Miss America pageant does not offer a realistic portrayal of the average American woman. Furthermore, data show that Miss America winners have been getting progressively thinner, which reflects the pressures faced by those who admire them.

The Rader Program is a clinical eating disorder treatment program based out of California that describes the media’s obsession with a thin ideal. The program posts a challenge: to think of 5 current female celebrities who are overweight and compare that to the task of naming 5 female celebrities who are either at an ideal weight, or underweight (Rader Programs, 2014). Fashion magazines, in particular highlight the ideal expectation. This is evident through magazine surveys such as one completed by Glamour. This particular survey found that 61% of the participants felt ashamed of their hips, 64% felt embarrassed by their stomachs, and 72% were ashamed of their thighs (Rader Programs).

Mass media exert their influence most effectively upon their audiences through repetition. On average, each year an adolescent is exposed to 5,000 advertisements that have some mention of physical attractiveness (Rader Programs, 2014). More than half of
commercials targeting women mention physical attractiveness (Rader Programs). There are many celebrities and models who are suffering from eating disorders. For instance, more than 25% of Playboy centerfold models are within the criteria to be considered anorexic (Rader Programs). The size of models has also evolved over time: a plus-sized model used to be, on average, between sizes 12 and 18, while now the industry dictates that plus-sized models be on average between sizes 6 and 14 (Rader Programs).

Television shows also contain many stereotypical portrayals of women, which have effects on viewers, especially adolescent ones. For example, the ABC TV show “Ugly Betty” portrays its main character Betty, as an “ugly Latina girl in the aesthetically-centered world of New York City fashion” (Betty) (Ryan, 2013, p. 1). The nature of the show is to stereotype and classify Betty as a unique individual which to whom men would not be attracted, in particular the son of the woman looking to hire her (Ryan). In one particular study conducted by Erin Ryan, 128 girls of middle-school age were assessed in order to determine the relationship between viewing an “ugly” lead character, such as Betty, on television to how they perceive beauty and their own body (Ryan). Ryan found that the more these young girls watched television, the more their thin-ideal views increased and positive views of their own bodies’ decreased (Ryan). Those who typically did not watch the TV show “Ugly Betty” held a higher regard for Betty as a character and were more likely to make comparisons between their bodies and those of their peers (Ryan).
CHAPTER THREE: THEORETICAL FRAMEWORK

Social cognitive theory (Bandura, 2002) is particularly relevant to this study because it outlines how media exposure can influence the choices people make and actions they take. Refuting the traditional belief that behaviors are controlled either externally or internally, social cognitive theory “explains psychosocial functioning in terms of triadic reciprocal causation” (Bandura, 2002, p. 94). This theory incorporates “personal factors in the form of cognitive, affective, and biological events, behavioral patterns, and environmental events” in a cause and effect structure, rather than as separate factors (Bandura, p.94). This theory operates on the assumption that each factor influences the others. Behaviors we witness throughout our lifetimes can influence our worldview and the actions stemming from it. In that sense, social cognitive theory suggests that mass media can affect how individuals choose to live their lives.

This sociocognitive approach takes the stance that “human nature is a vast potentiality that can be fashioned by direct and observational experience into a variety of forms within biological limits” (Bandura, 2002, p. 94). In other words, who we become is a combination of nature and nurture -- both experiences and genetic factors.

Bandura, the author of social cognitive theory, is most well-known for his Bobo doll experiment, in which children watched a clown aggressively attack a doll. The attack displayed several abusive behaviors including, hitting the doll with a mallet, kicking it, flinging it, and throwing balls at it. After this exposure, the children were placed in a room with toys they could not touch, leading them to feel frustrated. Then, the children were moved to a different room that contained toys from the Bobo doll video.
Researchers found that about 88% of the children acted aggressively using the toys, to imitate the aggressive behaviors portrayed in the video (Bandura, 1977).

This experiment became the starting point for Bandura’s theorizing on the social cognitive way of learning, which is often described by the phrase “monkey see, monkey do”. This is otherwise known as observational learning, which consists of four components: attention, retention motor reproduction, and motivation (Bandura, 1977). Just as the children responded to mediated violence by displaying similar behaviors, people can also respond by modifying their lifestyle habits, such as eating and dieting, in accordance with media content of models dieting and an excessive focus on body image—for example, TV shows such as The Biggest Loser, Heavy, and America’s Next Top Model.

The famous young girls’ idol doll, Barbie, is one example of how Bandura’s theory can be applied. Barbie is just one example of the multitude of implications that media exposure can have on adolescents and children. One study analyzed the effect of exposure to images of Barbie dolls on the body image of 5- to 8-year-old girls (Dittmar, Halliwell, & Ive, 2006). Barbie is depicted as an unnaturally thin female with unrealistic body proportions, creating an image that is rather unhealthy (Dittmar, Halliwell, & Ive). This particular study compared Barbie doll exposure effects to those of neutral images and those of images from a new, full-figured doll named Emme (Dittmar, Halliwell, & Ive). Results showed that after viewing Barbie doll images, the young girls had high rates (increased) of body satisfaction, but not after viewing the images of neutrality or those of Emme (Dittmar, Halliwell, & Ive). The images were found to affect not only the young girls’ self-esteem, but also their satisfaction with their own bodies’ and desire to change
The research suggests that there is a sensitive time in young girls’ lives, which ends around the ages of 7 and 8 (Dittmar, Halliwell, & Ive). This time period is particularly influential because during this time, “girls have internalized the thin beauty ideal by then, and their desire to be thinner is more a reflection of that internalized standard than a direct response to environmental stimuli” (Dittmar, Halliwell, & Ive, p. 290). Barbie is the idol of young girls, but at the same time, a distorted, alarmingly thin public image. This research has suggested that sociocultural influences impact how children develop their self-esteem and idol expectations.
CHAPTER FOUR: DEFINING AND CONTEXTUALIZING BODY IMAGE

Body image is a complex concept: “one’s ‘image’ of one’s ‘body’ (hair, face, shape, weight, degree of visible fat and muscle, posture, etc.) represents a complex synthesis of visual memory, emotions, assumptions about gender and attractiveness, and kinesthetic sense of comfort or awkwardness” (Levine, 2009). Body image is often described as the feelings one has towards his or her physical appearance.

Levine (2009) suggests that there are three main reasons to theorize that media exposure can create eating abnormalities and affect body image:

First, media are saturated with messages about physical appearance and its significance for gender roles, health, pleasure, happiness and morality. Second, media in general and appearance-oriented media in particular are immensely popular. Finally, it is hard to comprehend how appearance concerns, body dissatisfaction, and unhealthy eating and weight management could have become so prevalent, influential, and, indeed, normative across age, socioeconomic status, cultures and subcultures in the absence of the influence of some form of mass communication. (p. 493)

Media images tend to portray an unrealistic physical appearance, while also illustrating the importance of such appearance and conveying the belief that individuals need to fit a particular size or shape in order to be considered “attractive”. It is no surprise, then, that unhealthy dieting, over-exercising, and depression stem from attempts to create the “perfect body image.”

Typically, only the best-looking and most flawless individuals appear on TV and in other forms of media content, even though most people are not as thin and do not have skin that is as flawless as shown in media images. This is visible even in the media content aimed at children; one study, for example, found that 100 female characters in 23 different Disney films were portrayed as “attractive and thin” (Klein & Shiffman, 2006). Very young children are beginning to feel the effects and influences of media messages.
They begin to understand that the female body image comes in two forms, according to the media. The first is that “thin is normative and attractive” and the second is that “fat is aberrant and repulsive” (Levine, 2009, p. 494).

Media’s creation of unrealistic images has been likened to a potentially harmful ideology, undermining the self-esteem of many who fail to meet the beauty standard. For instance, about 50% of women in the U.S. are overweight or obese, but only 13% of TV characters are (Klein & Shiffman). Men face similar statistics--about 60% of U.S. men are overweight or obese, but only 24% of the television characters represent this (Klein & Shiffman). In the context of several popular children’s videos, the characters that survive and avoid tragedy are those who are the most beautiful, such as Cinderella, Snow White, and Sleeping Beauty (Klein & Shiffman). It is also a popular theme for the protagonists to be thinner than the antagonists, which is especially evident among female characters (Klein & Shiffman). Research of cartoons’ messages also determined that one message was always clear: attractiveness is a very good thing (Klein & Shiffman). In almost all instances, characteristics that were socially desired were linked with attractiveness, while those that were less desired or disliked were linked with normality or unattractiveness (Klein & Shiffman). Klein and Shiffman also found that characters who were overweight were about three times more likely to be portrayed as unattractive compared to thinner individuals who were almost twice as likely to have more than normal levels of attractiveness (Klein & Shiffman). Since these images are targeting children, it is important to be aware of the implications they may have on their audiences.

Further, research on body image suggests that it can be challenging to categorize size, weight, and appearance. What is considered underweight and what is considered
normal? Media portrayals are problematic because the individuals who are underweight and extremely attractive are often those with the lead roles, playing popular and well-liked characters. This is apparent also in mediated portrayals of romantic situations, with male characters on TV and in movies typically choosing the thin as opposed to a “normal” looking female character. In fact, one study shows that by Fouts & Burggraf (2000) found that female characters of a heavier weight were more likely to receive insults by male characters, which typically cause laughter from the audience. In their analysis of 18 prime-time television comedies (such as “Friends” and “Mad About You”), 37 female characters were observed. It was also found that females who were under the average weight were overrepresented and negative comments fostered a large amount of reaction from the audience (Fouts & Burggraf). These findings suggest a multitude of beliefs about how the appearances of women are regarded. One message that arises is the fact that men, do in fact, pay attention to the appearance of women’s bodies, and if they do not meet the standards of the “thin ideal”, they may be subject to ridicule and condescension by males or others who are more thin (Fouts & Burggraf). Advice on weight loss tips or concealing extra weight may also be offered. Males often feel as though this is an accepted norm, due to the media portrayals acceptance of popular male characters making negative comments towards women who do not fit the “thin ideal” (Fouts & Burggraf).

After examinations of audience reactions, Fouts & Burggraf found that 80% of negative comments made by male characters were superseded by laughter, giggles, and “ooohs” from the audience (2000). An additional correlation was found: the more characters were the recipient of negative comments, the more the audience was reactive
There are several implications that arise from these findings. The first is that negative comments about heavier women receive approval audiences or other members of society, and these continue to reinforcement that those reactions may receive (Fouts & Burggraf). Second, positive reactions such as laughter by the audience create models that are perceived as acceptable for the treatment of heavier and sometimes even average weight, women (Fouts & Burggraf). The third is encouragement is apparent when greater reactions are linked with more negative comments about weight (Fouts & Burggraf). The fourth implication that can be made from these findings is that “television situation comedies not only reflect stereotypic values within society, but also model gender stereotypes, e.g., that heavier women are unattractive, undesirable, and laughable (Fouts & Buggraf, p. 931). Reinforcement of all of the above can create a biased model through which viewers of comedies such as these are subjected to believe in.

Men are also increasingly facing unrealistic portrayals of physical appearance, with a focus on being masculine and muscular. The mass media images of legends such as Terry “Hulk” Hogan and Dwayne “The Rock” Johnson have created a desire in many men to look as masculine and powerful as these characters (Levine, 2009). The images of these men are spread throughout most communities: on TV, vending machines, movies, magazines, wrestling DVDs, action figures, billboards and posters (Levine). The prevalence of these images makes them influential for individuals who are exposed to them on a regular basis.

Several studies have found a link between media exposure and a negative self-image. A study produced by Dohnt and Tiggemann (2006) assessed the influences of both peer and media exposure on adolescents’ body image. Dohnt and Tiggemann
interviewed 97 young girls at two different times, asking questions about satisfaction with their bodies, self-esteem, influences from peers, and influences from the media. The girls we interviewed at two different times; the first interview was conducted when the girls were in the first four years of formal primary school, between the ages of five and eight (Dohnt & Tiggemann). The girls were between the ages of six and ten for the second interview (Dohnt & Tiggemann). Between the first and second interview, the girls gained weight, which was expected as part of the aging process. However, they also showed an increased dissatisfaction with their appearance, lowered self-esteem, and greater tendency to imitate others (Dohnt & Tiggemann). At both time points, nearly half of the girls had a desire to be thinner (Dohnt & Tiggemann). Similar results have been replicated in other studies by Dohnt and Tiggemann (2005) and Ricciardelli and McCabe (2001). It was also noted that girls who had peers who desired to be thinner had the same desires themselves. Media had an influence on satisfaction, such that girls who watched television shows focused on appearance tended to have less satisfaction with their own appearance (Dohnt & Tiggemann).

Another study, conducted by Harrison (2000), examined media exposure in relation to eating disorder behaviors. It was found that for females, “exposure to thin-deal magazine content is related to increased anorexia and, among 9th- and 12th-grade females, increased bulimia” (p. 137). The author summarized research showing that television exposure was a predictor of bulimia. Also, those who watched television shows with a focus on body-improvement were more likely to desire to be thin, experience dissatisfaction with their bodies, and show potential to develop anorexia (Harrison).
Bessenoff (2006) conducted a study looking at the exposure to “thin-ideal advertisements” and their effects on body image issues. He found that concerns about weight, along with difficulties with mood, self-esteem, and even depression arose as a result of exposure to the “thin-ideal” (Bessenoff). Specifically, the author offers the following alarming summary:

Women with high levels of body image self-discrepancy experienced higher levels of dejection and agitation related mood; lowered self-esteem, particularly in the domain of appearance, and increased levels of depressive thoughts when they viewed thin-ideal advertisements than when the viewed advertisements that did not depict the thin ideal (p.247). Self-discrepancies are defined as “representations in the self-concept of ways in which one falls short of some important standard” (Bessenoff, p.240). It is important to note that the results were not the same for individuals with low levels of body image self-discrepancy, implying that those with higher body image self-discrepancy are more prone to suffer negative impacts from exposure to thin-ideal appearances (Bessenoff).

The unattainable ideal is described in yet another study. Research by Groesz, Levine, and Murnen (2002) found that body image was conveyed more negatively after viewing slender images as opposed to normal-size, plus-size, and inanimate object images (Groesz, Levine, & Murnen). The researchers also found that this was more apparent for individuals under the age of 19 (Groesz, Levine, & Murnen). The meta-analysis conducted with this research “supports the sociocultural perspective that mass media such as fashion magazines and television promote, if not establish, a standard of slender beauty that leads many females to feel badly about their weight and shape” (Groesz, Levine, & Murnen, p. 12). Standards such as these especially influence women: “For many women, weight is a quick and concrete barometer by which to measure
oneself and one’s worth—how well one is doing as a woman” (Rodin et al., 1985, p. 290).

Kilbourne, Levine, Smolak, and Pollay (as cited in Groesz, Levine, & Mumen, 2002) describe the reality of media: the media are “targeting markets to sell products such as diet, cosmetics, and exercise gear, the media construct a dreamworld of hopes and high standards that incorporates the globalization of slenderness and weight loss”. Due to the construction of an ideal woman the media has created, young girls may often be unaware that there are no rules or specifications as to what size we should be. They forget the uniqueness that they are given and do everything they can to focus on changing themselves to fit into the images that are portrayed as important and popular. One particular study notes the quote of a young girl on viewing magazine images of teen magazines: “Am I fat?… Am I overweight? Like, you never think about it until you look at it (Nichter & Nichter, 1991, p. 263).

The media portray images of the perfect body: with flawless skin, a thin waist, long legs, and well-developed breasts (Groesz, Levine, & Murnen, 2002). As opposed to the male body, the female body is believed to an object of desire (Groesz, Levine, & Murnen). The male body is described and viewed as a whole, such as the entire face or entire clothed body. On the other hand, the female body is typically described and viewed for the features she separately contains, such as her eyes, arms, legs, etc. (Groesz, Levine, & Murnen). Due to this objectification of female bodies, girls at young ages begin to focus on looks and appearance as opposed to their personalities or accomplishments (Levine & Smolak, 1996). On the basic of objectification is theory (Frederickson & Roberts, 1997), Groesz, Levine, and Murnen argue that “because females are socialized
to see themselves as objects to be looked at and evaluated, they are more likely to feel shame and anxiety for not appearing perfect” (p. 2). In order to continue to influence audiences and continue to generate revenue, the media promotes a variety of products that focus on looking perfect and obtaining and maintain the “thin-ideal” body. Researchers Harrison and Cantor (1997) found that women who had a greater amount of magazine exposure were more likely to report symptoms correlated with eating disorders.

The internet, particularly the social media outlet Facebook, is becoming a significant influence on the life of most adolescents. A study by Tiggemann and Slater (2013) describes the correlation between internet exposure and the thin-ideal internalization. The internet is used for many forms of entertainment, including streaming media, shopping, and browsing fashion, celebrity and magazine websites (Tiggemann & Slater). All of the above seem to have a common focus on appearance, particularly with the promotion of the thin-ideal (Tiggemann & Slater). The use of Facebook, in particular, seems to be associated with negative body image (Tiggemann & Slater). Tiggemann & Slater found that individuals who used Facebook had more body-related concerns about multiple parts of their bodies than those who did not use Facebook (Tiggemann & Slater). They also found that the more time individuals spent on social networking sites, the greater their levels of thin ideal internalization, body surveillance, and drive for thinness all appeared to be (Tiggemann & Slater). As network users create their profile on each social site, it would only seem plausible that appearance becomes one of the major concerns. Due to the accessibility that adolescents now have with technology and social networking to connect with their peers, there may be increased opportunities to make comparisons with other users and to desire greater physical attractiveness, which may be
associated with a negative body image (Tiggemann & Slater). This research has provided evidence of a link between the effects of social networking through means of the Internet and issues concerning body image among adolescent girls (Tiggemann & Slater).

While virtually everyone is exposed to mass media, it is obvious that not everyone is likely to develop some form of eating disorder resulting from such media exposure. Individuals may have certain predispositions or vulnerabilities that cause them to develop a disorder. Emotions and beliefs play a role in how an individual may act, or how seriously they may take messages from the media concerning eating and appearance.

One sufferer’s recovery story from MEDA, a non-profit organization dedicated to the prevention of eating disorders, describes the reality of media’s influence:

While the media is not the sole cause for eating disorders, without it, this form of self-abuse would most likely not exist. I was taught through television, magazines, movies, etc. that by changing my body, I would be able to change myself and the feelings I kept inside. Bodies in the media seem to change so easily and are given much praise when they do. When my life already felt out of place and lost, I saw through the images in the media, that if I only changed my outer appearance, I would be happy. However, each time I failed at making the changes I wanted, I felt even more lonely and depressed. Instead of learning to love myself, this culture taught me that I should seek to alter and “perfect” who I was and the image I put forth. At the time, I did not know the effects of such a damaging and harmful message. (MEDA, 2014)

This account details feelings that media exposure often amplifies. Although each individual receives messages differently, the way the message is delivered ultimately influences how adolescents interpret it.

Sociocultural pressures appear to be increasingly affecting the behaviors of adolescent girls. These pressures include the thin-ideal body image, the major focus on appearance of women, and the importance for women to achieve success in society (Stice, Schupak-Neuberg, Shaw, & Stein, 1994). Mass media represent one avenue
through which these pressures are conveyed to society, particularly adolescents. This is evident in several ways: 1) an increase in the number of eating disorders in recent decades has correlated with a decrease in the body weight of an ideal female, an image conveyed through mass media; 2) The rise of eating disorders has correlated with an increase in the number of advertisements for weight loss, whether through dieting or exercise; and 3) A study in which women viewed images of thin, average, and healthy models, showing that thin-model images was linked to a lower self-esteem and a decreased satisfaction in one’s weight (Stice et al.). Other research has shown that, following after exposure to magazine images containing thin models (as opposed to average-sized or control models), women have shown increased rates of depression, stress, guilt, shame, insecurity, and body dissatisfaction (Stice et al.).

Repeated exposure to mass media is one risk factor for developing eating disorder symptomology, by beginning to internalize the thin-ideal within women (Stice et al., 1994). Due to the unrealistic goals that this internalization creates, women often become dissatisfied with their bodies (Stice et al.). Excessive dissatisfaction can lead to symptoms of eating disorders; the more dissatisfied a woman feels, the more she will partake in activities such as purging or restricting intake (Stice et al.).

Advertisements on the radio, television, and magazines have shown an increase in promotion of diet foods and dieting resources between 1973 and 1991 (Spettigue & Henderson, 2004). Further, such advertisements are much more likely to be directed at women. A study conducted by Anderson and DiDomenico (1992) found that the women’s magazines contained a total of 10.5 times more diet advertisements than men’s magazines between the years of 1973 and 1991. Due to the large emphasis that the beauty
industry places on appearance, women who view these advertisements become vulnerable to social and cultural pressures to be as attractive as possible. Spettigue and Henderson explain the situation this way: “not only do the media glorify a slender ideal, they also emphasize its importance, and the importance of appearances in general” (p. 16).

Advertisements that especially affect adolescents and children are the commercials between Saturday morning cartoons. Analysis of 675 commercials by Ogletree and colleagues (1990) found that a large portion, 60.6% of those commercials were for some sort of food. Of those commercials analyzed, 13.8% were categorized under appearance enhancement, and the majority contained more female characters (Ogletree et al.). As children are constantly bombarded with images focused on appearance, they begin to understand how important looks are in the realm of society.

There has been and will always be a desire to change one’s body, and there will always exist weight loss methods that are less than healthy, argue Spettigue and Henderson (2004). The media provide the outlet that drives these social and cultural mandates about appearances into the minds of individuals, affecting especially large numbers of women (Spettigue & Henderson). The media are so influential because they can reach anyone at any given time in any location, and this is illustrated particularly well by a study conducted in Fiji, which found some important connections between media usage and feelings of dissatisfaction towards one’s body and eating disorder symptoms (Becker, Burwell, Herzog, Hamburg, & Gilman, 2002). Until recently, Fiji was a society that lacked a large amount of media influence and was relatively unaffected by the traditional Western mass media impacts (Becker et al.). For the study, behaviors of
adolescent girls in Fiji were observed before and after television was introduced in Fiji (Becker et al.). The results showed that after adolescent girls had spent some time regularly watching television, many reported an increase in feelings and behaviors that characterize eating disorders (Becker et al.).

Groesz, Levine, and Murnen (2002) conducted a meta-analysis of 25 controlled experiments to observe impacts of “thin-ideal” images. The analysis results showed that females had a lower amount of body dissatisfaction after looking at thin images as opposed to control images (Groesz, Levine, & Murnen). Researchers found that this meta-analysis backs up the sociocultural theory “that the mass media creates and promotes a standard of beauty that leads many adolescent and adult females to experience significant body dissatisfaction” (Groesz, Levine, & Murnen).

Not only does much media content support and encourage the “thin ideal,” but it also plays a role in ensuring that those who already have an issue with eating disorders remain “addicted” (Spettigue & Henderson, 2004). Women who suffer from anorexia nervosa use a large amount of media and confess to having an “addiction” to fashion magazines (Spettigue & Henderson). Several even state that the point in time where they turned to media the most was after the lives were dominated by their disorders (Spettigue & Henderson). This is backed up by additional research suggesting that the behaviors of these women were characterized by symptoms of other compulsive and addictive issues (Spettigue & Henderson). Beauty magazines became instruction books for women suffering, and provided a standard to live by promoting thinness and restrictive dieting behaviors (Spettigue & Henderson).
Media images that focus on the thin ideal often have both short-term and long-term implications for those who are viewing them. When college students are given images of thin women in magazines or slides, they almost immediately display more negative feelings about their body and show an increase in the desire to be thin (Fernandez & Pritchard, 2012). But images of thin models are not the only culprit. According to the same study, it is apparent that most magazine content is focused on appearance, considering that about 40% of the major headlines in current women’s health magazines, between the years of 2003 and 2008, contained objectifying phrases (Fernandez & Pritchard). Some examples of objectifying phrases include: “knockout legs”, “sculpted butt”, “firm thighs”, and “bikini body” (Aubrey, 2010). Such objectifying headlines, paired with many images of flawless and thin individuals, often lead to increased body dissatisfaction (Fernandez & Pritchard). The focus on thinness is especially apparent for women. Men often view magazine images that inspire them to be lean and toned, with perfect six-pack abs. Much like the women react more negatively after viewing thin images, men who view images of muscular men show more negativity towards their own bodies (Fernandez & Pritchard). There are also decreases in self-esteem, body esteem, perceptions in one’s own attractiveness, and an increase in concerns about fitness, weight, and muscularity following the viewing of muscular images among men (Fernandez & Pritchard).

Based on the research reviewed so far, I propose the following hypotheses about the self-reported attitudes and behaviors of the participants in this study:
H1a: Participants who report greater exposure to fashion, celebrity, and fitness magazines will rank images of underweight individuals as more attractive than would participants who do not read such magazines.

H1b: Participants who report greater exposure to TV will rank images of underweight individuals as more attractive than would participants with lesser exposure to TV.

H2a: The more attractive participants perceive the images of underweight individuals to be, the more rigorous their calorie monitoring and diet routines would be.

H2b: The more attractive participants perceive the images of underweight individuals to be, the more rigorous exercise routines they will report.

H2c: The more attractive participants perceive the images of underweight individuals to be, the lower their self-reported attractiveness and self-reported physical shape are going to be.

In addition, this study contained a qualitative portion, exploring to what degree participants were aware of media effects on their body image. To explore this, the following research question was posed:

RQ1: How did participants perceive and describe the effects media have on their body image, self-esteem, and dieting habits?
CHAPTER FIVE: METHODS

The participants were invited to answer questions through the research website www.psychdata.com, to which USD has a subscription. The participants were 107 undergraduate students taking at least one course that offered extra credit for participating in research studies through the SONA system. Participants were asked to answer a variety of questions, beginning with gender. These were presented in four different (counterbalanced) orders: participants self-assigned themselves to different orders by following instructions to click on one of four links depending on the first letter of their last name. Based on this answer, each participant was then taken to four images of people of his or her own gender, and was asked to answer questions evaluating the attractiveness of each image immediately after viewing it. A total of eight conditions were created—four designed for female participants and featuring images of women and four designed for male participants and featuring images of men. Two of the images portrayed extremely thin individuals (as judged by a pretest), and the other two portrayed individuals of normal weight (again, determined by a pretest). After exposure to all four images, participants were asked about their media use habits, with questions specifically focusing on amount of time of exposure to magazines and TV shows with predominantly entertainment content (the rationale is that such magazines and shows tend to promote unrealistic body images). After that, participants were asked about their dieting or other food intake control behaviors, and were also asked to what degree they are satisfied with their physical appearance. After all questions, participants were thanked for their time.
Procedure

The goal this research was to compare how the participants ranked the attractiveness and weight of the models in the photographs to the participants’ own dieting and exercising behaviors. The participants were asked to answer a variety of questions, beginning with gender. Based on the response, they were taken to four images of people of the same gender. Transgender was also an option, and this option redirected the participant to a questionnaire containing images congruent with the gender to which he or she was switching. They were asked to answer questions evaluating the attractiveness of each image immediately after seeing it. Following each image were two questions: “On a scale of 1 to 5, with 1 being the least and 5 being the most, how attractive do you find the person in this image?” and “On a scale of 1 to 5, how normal is the weight of the person in the image, where 1 is very underweight, 3 is normal, and 5 is very overweight?”.

After exposure to all four images, participants were asked several other questions concerning self-image, exercise, and dieting behaviors. The final question was an open-ended question, asking participants to explain how they felt media exposure affected their body image. Participants were encouraged to share any personal stories.

Stimuli

Before assembling the questionnaire, a pre-test was conducted to determine which images would be most effective in the research process. Six images were identified for each of the following categories: extremely thin female, normal-weight female, extremely thin male and normal-weight male. Ultimately, this selection was narrowed down to two images for each category. The final images were chosen because they had the most
similar pretest rankings for the models’ attractiveness and weight categorization (underweight versus normal).
CHAPTER SIX: RESULTS

Demographics and Descriptives

There were 45 men and 62 women who participated in the online study, for a total of 107 participants. None of the participants reported that they were transgender. The average age of the survey participants was 21 years. The average age of the male participants was 20.45 years, while the average age of female participants was 20.9 years. In response to the question about how many hours they exercise in a typical week, most participants, regardless of gender, reported exercising one to six hours a week. During those hours, men stated that they spent most of their time lifting weights and doing cardio exercises. Women stated that most of their exercise time was spent on cardio.

Participants were also asked about their feelings towards their own attractiveness. On a scale of 1 to 5 with 1 being not very attractive and 5 being attractive, male participants’ average ranking of their attractiveness was 3.14. On the same scale, the average ranking among women was 2.94. From these results, we can observe that women in this survey feel as though they are less attractive when compared with men’s feelings about themselves.

The importance of calorie intake was also different between men and women. On a scale of 1 to 5 with 1 being not very important and 5 being extremely important, the average ranking of importance of monitoring one’s calorie intake for men was 2.43. Women, on average, ranked the importance of monitoring one’s calorie intake at a 2.84. The same trend was noted about assessing one’s own physical shape; however, the difference in that category was much more notable. On a scale of 1 to 5 with 1 being poor physical shape and 5 being great physical shape, the average response was 3.02 among
men and 2.54 among women. This suggests that women who participated in the study hold more negative thoughts about their current physical shape than the male participants do in regard to their own bodies.

Restrictive dieting had yet another large variation among genders. Five out of the 45 male participants, or 11% reported that they had tried a restrictive form of dieting in hopes of weight reduction within the last 6 months. By contrast, about 34%, or 21 out of the 62 female participants reported that they had tried a restrictive form of dieting. A large gap between genders (23 percentage points) is apparent. Calorie restriction was the most common method of restrictive dieting noted among the participants, both male and female.

Binge eating, defined as excessive eating followed by feelings of guilt, was prevalent among 18% of the male participants and 23% of the female participants. The use of laxatives was lower for both genders: 2% for males and 10% for females. None of the male participants reported that they had ever induced vomiting to purge food or lose weight, while 5% of women reported doing so. Both genders admitted to skipping meals at least once: 36% of males and 45% of females. Around 4% of the male participants confessed working out to the point of passing out or getting sick, compared to 5% of women.

The results showed that cosmetic surgery was often an item on participants’ wish lists. About 13% of the male participants reported that they had considered or dreamed about cosmetic surgery to remove excess fat, compared to the 40% of females. Of the same sample population, 2 out of the 45 men, or about 4%, and 5 out of the 62 women, or about 8%, reported that they had been diagnosed with some form of eating disorder.
The results for the participants in the sample were consistent with national data provided by Eating Disorders Hope, a member website of the Eating Disorders Coalition, which states that between 1% and 4.2% of women are diagnosed with anorexia nervosa at some point in their lives (Eating Disorders Hope, 2013). By comparison, about 3% of the women in this study stated they have been diagnosed with anorexia nervosa at some point in their lives. The Eating Disorders Hope website also states that about 4% of females have experienced bulimia at some point in their lives. By comparison, 4.8% of the survey participants reported such a diagnosis. These statistics show that the participants in the study were relatively similar to the general population. The numbers for males are significantly lower, both in the study sample and based on national data.

The website of the Eating Disorders Coalition offers slightly different data, stating that the lifetime prevalence for eating disorders is somewhere between 0.6% and 4.5% (Eating Disorders Coalition, 2013). Lifetime prevalence for women is 0.9% for anorexia and 1.5% for bulimia (Eating Disorders Coalition). Lifetime prevalence for men is about 0.3% for anorexia and 2% for bulimia (Eating Disorders Coalition). It is possible that the participants in this study reported a slightly higher incidence of eating disorders than some of the national data averages because of a self-selection bias (i.e., they were more likely to choose to participate in this online study via the SONA system because of their personal history with disordered eating).

**Hypotheses Testing**

The first hypothesis (part a) proposed that participants who had a greater amount of exposure to fashion, celebrity, and fitness magazines would rank the images of underweight individuals as more attractive. The magazines participants listed were
coded; fitness magazines (*Women's Health, Shape, Fitness*, etc.), fashion magazines (*Elle, Vogue, Cosmo, GO*, etc.), and celebrity culture magazines (*People, US Weekly*) were designated code 1. Any magazines not aligning with these categories, such as *Good Housekeeping, Parenting, ESPN, Sports Illustrated*, etc. were designated code 0. A statistically significant relationship, $t(100) = 2.17, p < .05$, between reading fashion/fitness/celebrity magazines and the perceived weight of the extremely thin models; participants who reported reading these magazines were likely to view the images of the thin models as less underweight on a scale of 1 to 5 ($M=1.79$, $SD= .53$) than those who did not report reading fashion/fitness/celebrity magazines ($M=1.58$, $SD= .47$). However, reading fashion/fitness/celebrity magazines did not offer a statistically significant relationship with the perceived attractiveness of the extremely thin models.

On the other hand, the results did not support part b of hypothesis 1; the number of hours participants were exposed to television and magazine reading per week and how they perceived the attractiveness or weight of the skinny model images were not related at a statistically significant level. These results did not show statistically significant relationships. Therefore, H1 was only partially supported; the participants who read fashion, fitness, and celebrity magazines did not appear to be as alarmed by the excessively thin models’ weights compared to participants who did not report reading such magazines.

The first two parts of the second hypothesis (H2a & H2b) proposed that the more participants viewed the images of underweight individuals as attractive, the more rigorous diet, exercise, and calorie monitoring routines they would report. There was no evidence of statistically significant relationships between the participants’ perceptions of
the attractiveness of excessively thin models and other variables such as the importance of calorie monitoring, frequency of exercise, and multitudes of diet (i.e., use of supplements) or disordered eating practices (vomiting, use of laxatives, etc.). Parts a and b of hypothesis 2 were not supported.

This noted, there was a marginally significant quadratic relationship (p=.09) between the perceived attractiveness of the images of skinny models and binge eating. This was apparent in the participants’ perception of thin models as more attractive, which significantly predicted the tendency to partake in binge eating, $\beta_1 = -0.23$, $\beta_2 = 0.06$, explaining a marginally significant proportion of the variance in binge eating, $R^2 = 0.05$, $F(2, 99) = 2.43$, $p = 0.09$ (Figure 1 below).
The third part of hypothesis 2 (part c) proposed that participants who viewed skinny images as more attractive would rate themselves as less attractive and in worse physical shape. This hypothesis supported an inverse relationship between the perceived attractiveness of thin models and the participants’ self-reported attractiveness and physical shape. There was no significant support of this hypothesis from the data. This part of the hypothesis was not supported. However, there was a significant positive correlation that was observable between the level of self-attractiveness participants reported and their perception of their physical shape; participants who perceived themselves to be in better physical shape also perceived themselves as more attractive.

**Qualitative Analysis**

The research question posed earlier asked how participants perceived and described the ways media affect their body image. In an attempt to answer this question, this section focuses on a thematic analysis of the answers that participants provided to the open-ended question about their perception of media influences on their body image. There were a lot of similarities among the comments, suggesting a high level of awareness of the effects of the thin ideal in media content on their attitudes and behaviors; One common belief shared by participants, for example, was that the TV and other forms of media depict an image of the “perfect” man or woman, and these portrayals cause the majority of viewers to strive to meet that standard of perfection.

However, differences were evident in how participants evaluated their attitudes and behaviors in response to the unrealistic ideal. Some participants stated that idealized images encouraged them to work out and eat healthy in order to look like the media icons they admired, but other participants noted that they are working out and eating healthy
for the purpose of being healthy rather than looking a particular way. Several more common themes that emerged in the comments are outlined as follows.

**No Effects/Third-Person Effects**

There were only a couple of comments from participants stating that they felt that media had little to no effect on how much they like or dislike their bodies. Some believed that media are more likely to affect others. One participant stated, “I would say that my problems are based on how I feel…bloated all the time and I feel fine in clothes. I really like how they are incorporating larger women in commercials etc. and web postings… the new message of ‘what is beautiful’ really great!”

**Media Avoidance**

One theme noted from the free responses was avoidance of media content due to the pain the thin images cause. One participant noted that she tries to stay away from media exposure. She went on to state that they feel “beauty is in the eye of the beholder—so as long as I find myself adequate is all I care about.” This is a stance that may not be easy for individuals suffering from low-esteem to take.

One personal comment particularly stood out. A 19-year-old female participant described her firm belief that media plays a major role especially in young girls’ self-image. She recalled viewing and receiving Victoria’s Secret catalogs and advertisements, and feeling discouraged by the images they portrayed. She wrote that the young women in these photos had amazing bodies, and that everyone appreciated their attractive physical, almost “perfect” appearance. However, she added that she realized real women have curves, which is perfectly okay. “Everyone is different so don’t judge them based on how they look, be your own person!” was one of the most positive quotes provided by
this particular participant. It appears that society has indeed come so far away from valuing uniqueness that the desire to look a certain way undermines creativity and individuality.

**Embracing a Media-Induced Guilt Trip**

A second theme was participants’ full awareness and sad acceptance of the guilt and anxiety induced by idealized images in the media. One 18-year old participant even used the term “inadequate” when describing how she felt about their own weight and inability to live up to the ideal images on the TV screen. One personal story was particularly interesting and unique. A 23-year old female participant discussed a long-standing phobia of being fat because she was “disgusted by fat rolls and overweight and obese people”. However, she also felt that being too thin was also problematic and thus aimed at following BMI guidelines to maintain a healthy weight. She skipped meals frequently in high school to stay away from unpleasant peers in the cafeteria. In the meantime, she would play games or grab a quick snack from the concession stand. Then, she was deployed in Iraq, where food was free, and that became an issue because there were not a lot of other things to make the time pass. So, she continued to eat and eat, and, eventually began gaining quite a bit of weight. When more than one person would invite her to a dinner, she would accept all invites. Then the real trouble began: “Because of all this I started to bring my toothbrush and toothpaste with me to work and I would purge after lunch and dinner.” She felt obligated to purge due to all the pressure from her boss, and because she knew she needed to maintain prime physical standards to remain in the military. Another reason for her purging behavior was the desire to look good for her husband when she returned home. This female participant admitted she has a problem
with overeating and her weight, and wrote that she knows she should begin some form of counseling. This narrative is a great example of how real eating disorder issues truly are, and how they may be silently occurring in people we know.

**Resisting Media’s Thin Ideal**

A third theme was resistance to guilt and anxiety induced by media, with focus on health for health’s sake. Some participants stated that the media encouraged them to work out and be fit, but they realized that looking like celebrities would probably never be attainable. These respondents were aware of limitations, such as lack of money, access to personal trainers, and personal cooks, and lack of time to spend hours a day working out and getting fit, which is something celebrities can afford to do. One participant mentioned that she feels as though “the media makes it look like being skinny is easy. All that you have to do is take a pill, or some fad form of weight loss supplement, and ‘obesity will be cured’”. Some participants were aware that exposure to “easy fixes” in mediated content might discourage the belief that eating healthy and exercising is a way to maintain a healthy lifestyle, regardless of the number on the scale.

**Indirect Effects of Media’s Thin Ideal**

A fourth theme was experiencing the indirect effects of the thin ideal, or media directly affects some people, and then these individuals exert pressure on others around them to be thin. One comment from a female participant emphasized the influence of living with several other girls: “…it is especially hard to feel confident and good about my body while living in a sorority full of bodies that I see as ‘better’ than mine”. This participant felt a desire to look like others or even just be able to wear the same sizes of clothing. She brings up a very important point: “If anything, the media pushes the latest
fashion trends and styles, which often are meant for sizes 0-4, so if you aren’t that size, the clothes either don’t come in your size or don’t look right on your body”.
CHAPTER SEVEN: DISCUSSION

There has been a large amount of research on the impacts of media on body image, and how perceptions of one’s body image may lead to disordered eating. This research examined a small population size to determine if there was a statistical relationship between a participant’s amount of media exposure and eating disordered behaviors they may possess. The results were much more significant among females, for a multitude of reasons discussed in the literature review. For this research, there were a much larger number of women (62) compared to men (45), so the majority of discussion of results is focused towards women. Women also had more reports of eating disorder diagnosis, restrictive dieting, and appearance concerns. The findings from our questionnaire did not align with our hypotheses as predicted. Although the hypotheses we formed were only validated to a small degree or none at all, we found an important correlation between the manifestations of binge-eating disorder following a preceding dieting behavior. The dieting may have been weeks, months, or even years before the binge-eating habits appeared.

Several studies have found evidence that binge eating may be an important indicator of previous starvation episodes or extreme diet-like behaviors. Although it may not seem initially apparent, post-diet, research has shown that food restriction often leads to more long term effects. Binge eating is often linked with dieting behaviors or restriction within the preceding time period, whether it is 6 months, 1 year, 5 years, etc. At any point in time throughout the patient’s life, if food was once restricted for a significant amount of time, similar to prisoner of war (POW) situations, the body’s ability to regulate hunger and appetite may be affected because of a tendency to overcompensate
due to deeply internalized fears that food supply might again be restricted, threatening one’s ability to survive.

The importance of binge eating as an indirect indicator of previous extreme food restrictions is supported by research by Polivy and colleagues (1994), who investigated binge eating among 67 World War II combat veterans and 198 former prisoners of war. As they predicted, they found that binge eating was fairly rare among combat veterans but was substantially more evident among combat veterans who had been prisoners of war in German war camps (Polivy et al.). During the imprisonment, Germany had rationed the prisoners’ food. Those who attempted escape were severely punished, and rations were excessively meager (The Library of Congress, 2004). The Library of Congress offers several personal statements regarding experiencing concentration camps in Germany. Personal accounts detail the severity of food restriction: a loaf of bread was split among five or six people (The Library of Congress). One particular POW recalls experiences upon receiving a Red Cross parcel: “an awful lot of people got sick the first day just by eating too much food too suddenly” (The Library of Congress). Accounts such as these suggest the direct effects of restriction, once an individual has been withheld something for so long, they will attempt to overcompensate immediately upon restoration of normal conditions. Another account describes the mindset of most prisoners: “I started right off, whenever food is offered, eat it. You don’t know when the next food is, when the next meal is coming” (The Library of Congress). Prisoner accounts offer heart wrenching evidence of the fears, worries, and personal accounts of camp life and how much of a lasting effect this experience had on prisoners.
Polivy and colleagues found that almost 60% of the prisoners of war experienced binge eating on at least a couple of occasions in years following wartime trauma, compared to 29% of veterans who had not been prisoners of war (Polivy et al., 2004). More than 34% of the POWs reported experiencing moderate to heavy binge eating (Polivy et al.). POWs are more likely the victims of future binge eating due to the excessive weight loss experienced while imprisoned; victims suffered severe food restriction and on average, lost almost 23 pounds or 15% of their body weight (Polivy et al.). It is important to note that some may feel that other traumatic stressors such as PTSD may cause binge-eating; however, binge eating is not a symptom of PTSD (American Psychiatric Association, 1987). It is also important to mention that trauma alone, without food restriction has not been shown to cause binge eating (Polivy et al.). Researchers in this study found that the dieting and binge eating relationship “is likely a causal one, with the dieting or deprivation causing the binge eating” (Polivy et al., p. 410). Prisoners of war are just one example of how restriction of food intake can affect future eating behaviors. Restriction and dieting behaviors affect not only the present but can also have serious consequences on how an individual will view food and eating, and affect their actions as well.

**Limitations and Directions for Future Research**

As with most research, this study did have some limitations. The results were based on a fairly small sample size of about 100 college students. There were only a small number of participants who reported a diagnosis of an eating disorder, which was not enough to develop a statistically significant relationship with the exposure to fashion, fitness, and celebrity magazines. However, examining each case as a separate individual
allowed for some more visible potential; it could be suggested that the desired relationship may be able to be observed within a larger population sample. One participant in particular, a 19-year-old female reported receiving diagnoses of both anorexia and bulimia, and reading unspecified magazines an average of eight hours a week. In contrast, another participant who had been diagnosed with bulimia reported reading fashion and celebrity magazines two hours a week. This difference could be accounted for in multiple ways, including predispositions that make one individual more likely to develop an eating disorder than another or how much of these magazines the individuals took to heart and acted upon the advice and suggestions offered within.

There were outliers among participants in terms of age and reported exposure to media. The sample population was one of convenience rather than a random sample. The results may have also been skewed by using a college population, as college students are constantly exposed to mass media through homework assignments, social interactions, campus activities, peer pressure, and other outlets the university may offer for students to experience the effects of mass media on a daily basis.

Future media effects research efforts may benefit from focusing on binge eating as an indirect measure of previous dieting measure, which may be more accurate than self-reported dieting behaviors. None of the studies reviewed earlier for this study investigated how long-term media exposure may correlate with binge-eating. Future health science research should focus on the early detection of binge-eating, and the relationship between binge-eating and previous dieting habits. Binge-eating has shown a significant relationship with past experiences of dieting, whether voluntary or involuntary. It would also be beneficial to study habits practiced following dieting, and
determining which behaviors should be monitored due to the possible progression into binge-eating disorders. In addition, it may be beneficial to study the quantity and quality of the media exposure of individuals who have been diagnosed with eating disorders, as well as explore any additional precursors that may have made them more vulnerable to developing an eating disorder.

CONCLUSION

The media portray thin individuals wearing size 0 clothes, when in reality, most ordinary women would never be able to fit into those clothes. As a result, we feel as though we must be overweight or fat because we cannot fit into the clothes that are being sold. This alters our entire view about reality, and can lead to several issues such as a low self-esteem or depression, which could eventually lead to eating disorders. As suggested by this study, some individuals feel that disordered eating is their only option of becoming skinny and resembling the mediated thin-image idea. In reality, disordered eating is the unhealthiest way to achieve anything, especially physical attractiveness. This paper has highlighted several areas of importance and demonstrated many ways in which the media may influence or amplify tendencies towards eating disorder symptomology. Although the quasi-experiment and self-report questionnaire did not produce results that supported the initial hypotheses, it is a starting point for further exploration. Mass media reaches out to audiences worldwide, affecting viewers and readers, and will continue to have serious impacts on health issues such as eating disorders for decades to come.
APPENDIX

QUESTIONNAIRE

Options for Thin Images
Options for Normal Images
Options for Thin Images
Options for Normal Images
What is your age? ______

What is your gender?

- Male (Participant is taken to pictures of men)
- Female (Participant is taken to pictures of women)
- Transgender
  - Have transitioned or is transitioning from:
    - Male to female
    - Female to male

For each of the above images, the following questions will be answered:

On a scale of 1 to 5, with 1 being the least and 5 being the most, how attractive do you find the person shown in this image?

On a scale of 1 to 5, with 1 being the least and 5 being the most, how much do you want to look like this person?

On a scale of 1 to 5, with 1 being very unhealthy and 5 being very healthy, how healthy do you think the individual in this image is?

On a scale of 1 to 5, with 1 being very unlikely and 5 being very likely, how likely is it you will ever look like the person in this image?

How often do you exercise in typical week?

- 0 hours
- 1-6 hours
- 7-10 hours
- 10+ hours

When you exercise most of your emphasis is on_____?

- Weight lifting
- Cardio
- Yoga
- Other (please specify) ________
What is the most influential reason for you to exercise?

- To have more energy
- To stay healthy
- To lose weight
- To gain muscle
- To look good
- I think it is enjoyable
- Other

Which of following forms of media do you use most frequently? (Check all that apply)

- Television (including online TV and apps)
- Magazines (including magazine websites and apps)
- Radio (including radio websites and apps)
- Newspapers (including new websites and apps)
- Blogs
- Other internet sites (Please specify:_______)

If you watch TV, what are your favorite programs/shows?

How many hours per week do you watch these programs/shows? (Please specify for each)

If you read magazines, which magazines are your favorites?

How many hours per week do you read these magazines? (Please specify hours for each)

How do your assess your attractiveness on a scale of 1 to 5, with 1 being not very attractive and 5 being very attractive?

On a scale of 1 to 5 with 1 being not very important and 5 being extremely important, how important is monitoring your calorie intake?

On a scale of 1 to 5 how do you assess your physical shape, with 1 being poor physical shape and 5 being great physical shape?

Do you currently or have you ever taken weight loss/workout supplements?

If yes:

Mark the supplements you are currently using or have ever used:

- Diet pills
- Protein shakes
- Meal replacement bars/shakes
- Steroids
• Pre/post-workout supplements

Have you tried a restrictive form of dieting in hopes of weight reduction within the last 6 months?

If yes, what kind?

• Calorie restriction
• Atkins
• South Beach
• Other (please specify_______)

Have you ever done any of the following?

• Binge eating, which is defined as excessive eating followed by feelings of guilt?
• Use of laxatives to purge food/lose weight?
• Inducing vomiting to purge food/lose weight
• Skipping meals
• Working out to the point of passing out or getting sick

Have you ever had a weight loss surgery?

Have you ever considered or dreamed about cosmetic surgery to remove excess fat?

Have you ever been diagnosed with:

• Anorexia
• Bulimia
• Other weight-reducing eating disorder (Please specify)

Please explain how you think your media exposure affects (if at all) how much you like or dislike your body. We’d love to hear any personal stories you would like to share!
REFERENCES


