

The Effects of Mass Media on Body Image

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CHAPTER ONE

INTRODUCTION

About half of all American adults are dissatisfied with their bodies (Garner, 1997). That dissatisfaction can lead to constant dieting, dangerous weight loss methods, and may even develop into eating disorders. The consequences are not just related to weight-loss methods either. Dissatisfaction with one's body affects an individual's mood and relationships. People who are ashamed of how they look tend to avoid getting involved in relationships and avoid social activities (Garner, 1997). Because body dissatisfaction may lead to such consequences, many studies have been aimed at finding a cause of body dissatisfaction so that it may be prevented.

The media has been found to be one source of this dissatisfaction because it presents an unrealistic idea of what one must look like in order to be attractive. A variety of theories have emerged to explain the effect of the media on body dissatisfaction. Some show a direct effect, while others show the effect mediated through different variables including type, social context, and psychological processes. Another way of accounting for individual differences is to say that the intended use of the media dictates how media effects body dissatisfaction. Finally, some studies show that the media effect is not a single-exposure phenomenon but an accumulation of media consumption (Harrison, 2003; Harrison & Canton, 1997; Tiggemann, 2003).

Though most studies have focused on women, there is increasing evidence that men are also suffering body dissatisfaction as a result of the media. Because it is a growing concern, many studies have been aimed at creating interventions to combat the effects, but no one intervention has proven best. Therefore, more research needs to be

conducted to better understand the influence of media on body image so that interventions may be targeted at the cause of the problem. The purpose of this project is to investigate the relationship between body dissatisfaction and the amount of exposure to different types of media.

Review of Literature

The Thin Ideal

Many people are dissatisfied with their bodies, and the media is one place that the standard for the “ideal” body shape is set. The focus on thinness in the media has historically been followed by an increase in public attention to weight and eating (Silverstein, Peterson, & Perdue, 1986). To understand the focus on thinness, magazines have been examined to find trends in the models’ sizes. Models in *Ladies Home Journal* and *Vogue* decreased in hip-to-waist ratio from 1900 to the twenties. After a temporary increase in the curvaceousness of models, The hip-to-waist ratios of models is now once again on a downward trend, approaching the values of the twenties (Silverstein, Perdue, Peterson, & Kelly, 1986). In the 1920s, when very thin models were fashionable, the U.S. Bureau of Home Economics and the American Medical Association documented instances of self-starvation and there were high rates of very thin girls entering college (Silverstein, Peterson, et al., 1986).

Because Miss America contestants and Playboy centerfolds are widely admired as having the prettiest bodies, they were studied to see the trends in this “ideal” shown in the media. Researchers gathered measurements of the contestants and the centerfolds and found that they continually decreased through history. Those measurements have stabilized since the seventies at 13-19% below the expected weight given the models’

height (Wiseman, Gray, Mosimann, & Ahrens, 1992). In 2000, the measurements and weights remained low for the height of the models (Pettijohn & Jungeberg, 2004).

Magazines are not the only source of thin images. Thinness is over-represented in television. A sample of the most-watched television shows found that only 5% of female characters were overweight (Silverstein, Perdue, et al., 1986). One-third of prime-time sit-com female characters were under an average weight, when in reality, only one quarter of women are below average weight (Fouts & Burggraf, 1999). Even the dialogue on television supports thinness as the thinner the female character, the more positive comments she receives from male characters. Some characters dieted even though they were not overweight (Fouts & Burggraf, 1999).

At the same time that the media promotes these thin models, Americans are dissatisfied with their bodies. Half or more of all American women are dissatisfied with their bodies (Garner, 1997; Cash & Henry, 1995). The problem of body dissatisfaction is not just limited to women. In a popular study by *Psychology Today*, 41% of the adolescent males and 38% of the young adult males who responded answered that they too were dissatisfied with their bodies (Garner, 1997). Combined, nearly half of the adult population, male and female, experience body dissatisfaction.

Thinness is a quality valued by individuals, even by those who already are thin. In a sample of 203 adolescent girls, over half said they wished to be thinner, and 53.8 % wanted to be thinner than what would be considered a normal shape (Champion & Furnham, 1999). Showing a similar desire for abnormal slimness, 40 % of the 159 underweight respondents to the body satisfaction survey wanted to lose more weight

(Garner, 1997). The goal of women seems to be more than just avoiding being overweight, but achieving an unhealthy weight that is under a normal range.

Body image has been defined as many things. In a study of the factors that make up body image, Banfield and McCabe (2002) narrowed the factors to three that were statistically significant. Thoughts and feelings about the body, perceived importance of the body and dieting behavior, and perceptions of the body all combine to create an individual's body image. When perceptual and attitudinal factors were compared in another study, attitudinal factors had the strongest effect on body image (Monteath & McCabe, 1997). Body dissatisfaction is one kind of body image disturbance that occurs when an individual becomes dissatisfied with one or more parts of his or her body (Thompson, 1995). Body image distortion is a perceptual problem in which a person over or underestimates his or her weight, and this problem is particularly prevalent among college-aged women. It is not a problem with vision or knowledge because the subjects demonstrate the ability to accurately estimate another person's size (Cullari & Trubilla, 1989; Galgan, Mable, Ouellette, & Balance 1989). Another way of talking about body dissatisfaction and body image is to measure the difference between subjects' estimated own body size and their self-determined ideal size (Monteath & McCabe, 1997). For many individuals, their image of their own body is different enough from their standard of an ideal body that they become dissatisfied with their body.

Consequences of Body Dissatisfaction

Body dissatisfaction can have health and social consequences. The health consequences start with dieting. Two thirds of all body dissatisfaction might be linked to weight gain, so many people experiencing body dissatisfaction will try dangerous

methods to lose weight (Garner, 1997). Only 15.2% of respondents to one survey said they never watched their weight (Dunkley, Wertheim, & Paxton, 2001). Those findings reinforce earlier survey results that indicated 84% of women and 58% of men have tried dieting to lose weight (Garner, 1997). The drive to be thin may lead to dangerous dieting methods. In total, 13% of women and 4% of men reported having induced vomiting to lose weight, and some did not even consider it an eating disorder. Approximately half of adolescent girls report skipping two meals a day to control their weight (Thomsen, Weber, & Brown, 2002). Half of women smokers and about a third of male smokers say that their smoking is a means to control their weight (Garner, 1997).

Disordered eating and eating disorders have been linked with body dissatisfaction (Harrison, 2000; Thompson & Stice, 2001; Durkin & Paxton, 2002; Botta, 2003).

Anorexia nervosa is a disorder in which the individual refuses to eat enough to maintain minimal normal weight. It often results in the loss of regular menstrual cycles and may even be fatal. According to the National Institute of Mental Health, 1 to 6 women out of 200 will have anorexia nervosa in their lifetime (Spearing, 2001). Bulimia nervosa is a disorder characterized by binges followed by efforts to purge the body such as over-exercising, fasting, inducing vomiting, or using laxatives. In their lifetimes, 2 to 8 of 200 females will suffer bulimia nervosa (Spearing, 2001).

Body dissatisfaction is not just linked to weight loss. Obesity is another potential physical effect of the pressure to be thin. Frustration with trying to fit the unrealistically thin "ideal" can contribute to some people eating too much and becoming obese (Silverstein, Peterson, et al., 1986). Spitzer (1999) cites articles documenting a new

problem among men called “reverse anorexia” in which men take steroids to increase their size to fit the ideal portrayed in the media.

One social implication of body dissatisfaction is that an ideal body is worth so much to young adults that they would be willing to give up years of their life to achieve it. Thirty-nine percent of female respondents to the National Body Satisfaction Survey and 28% of male respondents said they would give up three or more years of their life span to be their desired weight. Those percentages startled the researchers and made them wish they had asked more extreme lengths of life to give up (Garner, 1997). Heavy viewers of television were found to be more likely than light viewers to consider plastic surgery to make their body more like the ideal (Harrison, 2003). For these people, having the body type idealized in the media is more important than living a long life or enduring surgery.

Those who have higher body dissatisfaction have also been found to have difficulty in establishing dating relationships and a reluctance to have sex (Garner, 1997). Body image is also linked to mood. Body dissatisfaction and negative mood have a positive correlation so that when one increases, so does the other (Garner, 1997). Body dissatisfaction has physical, relational, and emotional effects, and has been connected to the thin images in the media. In light of this information, the purpose of this study is to examine the relationship between overall media habits and the prevalence of body dissatisfaction. More knowledge about the relationship between media and body image would enable researchers to be better able to develop meaningful body dissatisfaction intervention or prevention programs.

Theories Explaining the Effects of Media on Body Image

Studies that show the relationship between media and body image have examined different facets of the relationship. Some are based on a direct effects theory and argue that simply consuming media messages has an effect on body satisfaction. Others are based on limited effects and explain that the media has an effect through mediating variables. Uses and gratifications theory is one particular theory that says the intended use of the media mediates the effect.

Direct Effects

One approach to explaining the relationship between media and body image is to say that the media has a direct effect. This means that there is a direct relationship between consuming the media and body dissatisfaction. In some cases, the effect is quite immediate. Women were given a body satisfaction survey and a week later, were placed at computer stations showing thin images on the screen. After viewing the images, they answered that they had greater body dissatisfaction than that had before viewing the image (Durkin & Paxton, 2002). A single exposure to music videos that emphasize appearance can lead to a lowering of body satisfaction (Tiggemann & Slater, 2003). Even listening to audio tapes about appearances lowered women's body satisfaction (Levine & Cash, 2000). The direct impact of media is not limited to body dissatisfaction. Viewing thin images has a negative effect on mental disposition. Such pictures may increase anger and depression; increase unhappiness, shame, guilt, and stress; and decrease confidence (Pinhas, Toner, Ali, Garfinkel, & Stuckless, 1999; Stice & Shaw, 1994; Groesz, Levine, & Murnen, 2002).

The idea that seeing thin images in the media may have an immediate effect on body dissatisfaction was tested in bulimic and non-bulimic women. Both categories of women who were shown slides of thin models rated themselves as less attractive than women of either category when shown slides of heavier models (Irving, 1990). The effects of the media on mood and body dissatisfaction were found to occur to a greater extent in older adolescents than younger ones (Durkin & Paxton, 2002).

In other cases, the direct effect is a result of longer exposure. Adolescent females were tested for body dissatisfaction and restrained eating, or how often they participated in certain behaviors that restricted their eating to reduce their weight. Then, some were given a fifteen-month subscription to a fashion magazine. Those who had received the subscription reported an increase in negative mood, body dissatisfaction, dieting, and bulimic symptoms after the fifteen months (Stice, Spangler, & Agras, 2001). Girls who viewed commercials that focused on a thin model rated their body satisfaction lower after viewing than girls who saw "neutral" commercials (Hargreaves & Tiggemann, 2003; Hargreaves & Tiggemann 2002). Two years later, the same girls were measured, and they had an even lower body satisfaction than they did initially following the viewing (Hargreaves & Tiggemann, 2003).

Some research findings contradict the theory that media has a direct negative effect. In two studies, seeing ads that focused on thinness had an effect, but it had positive effects such as decreasing depression and increasing self-ratings of thinness (Myers & Biocca, 1992; Mills, Polivy, Herman, & Tiggemann, 2002). One possible explanation offered for these findings is that the subjects in this study imagined themselves as the models in the ads. Thus, the study reinforces findings that the media

does have a direct effect on viewers (Bishop, 2000). Another study found that women who had heightened body dissatisfaction actually experienced an improvement in mood after seeing non-appearance related commercials (Heinberg & Thompson, 1995).

All of these studies have one thing in common. They show that seeing the pervasive message in the media to be thin has an effect on viewers. Some show an immediate effect, and some show it over a longer period of time. Most found that the effect is negative, but there is some evidence that the thin images can temporarily improve body satisfaction. No matter the results, there is much evidence here that the media does play a role in the development or loss of body satisfaction.

The direct effects studies lend credibility to the claim that the media has an effect on body image, but they showed conflicting results. In most, the effect was lowered body satisfaction, but in some it was higher body satisfaction. The theory of limited effects attempts to address the differences by explaining that the media has an effect on some people some times, and is limited by different variables. Some of the mediating variables are type of media, social factors, and psychological processes.

Limited Effects

One possible limiting variable is the type of media. Fashion and beauty magazines have been found to have more of an effect on body image than other types of magazines (Turner, Hamilton, Jacobs, Angood, & Dwyer, 1997; Thomesn, et al., 2002). A new category of magazines that has been found to have a significant effect are fitness and health magazines (Cameron & Ferraro, 2004). Though magazines with particularly thin models are the most closely associated with body image disturbance, television programs with fat characters were found to correlate to eating disorders in girls. This is probably

because the fat characters are often teased and viewers want to avoid being the ones teased (Harrison, 2000). Though both magazine reading and television viewing have an effect on body image, their effect is limited differently. Magazine reading correlates to an internalization of the thin-ideal, and television correlates to lower self-esteem (Tiggemann, 2003).

Besides type of media, there are social factors that influence some individuals to be more vulnerable to the media than other people. Age, family pressure, and self-esteem were found to predict body dissatisfaction (Green & Pritchard, 2003). Comments and opinions of peers of the opposite sex are some of the strongest influences on body image (Stanford & McCabe, 2002; Ricciardelli, McCabe, & Banfield, 2000; Dunkley, et al., 2001). Another study found that a lack of social support made girls more likely to have lower body satisfaction after reading fashion magazines (Stice, et al., 2001). Personal body satisfaction before viewing the media will also affect how much the media will influence that satisfaction. When women had high initial body satisfaction, seeing slides of thin models did not greatly increase their weight concerns (Posavac, Posavac, & Posavac, 1998). Thus, some of the media's effects are not directly correlated to the media but to the life context in which the messages are received.

A third way of explaining differences in the media's effects on individuals is to discuss the mental processes that occur when a media message is encountered. One of these psychological processes is internalization, or the process by which a media consumer makes the standard their own. Internalization has been found to be a causal risk factor for body image distortion, eating disturbances, and a predictor of depression (Cusumano & Thompson, 1997; Morry & Staska, 2001; Thompson & Stice 2001; Durkin

& Paxton, 2002; Heinberg & Thompson, 1995). Internalization was also found to lead to dieting, though magazine reading alone did not (Sherwood & Newumark-Sztainer, 2001). Some types of media seem to be particularly internalized. Men who read fitness magazines and women who read beauty magazines were found to internalize the ideal, and their internalization related to eating problems and body shape dissatisfaction (Morry & Staska, 2001).

Because internalization has been connected with the media's effect on body dissatisfaction, some research has tried to limit the internalization process. Social activism, which includes activities like writing letters to advertisers to protest commercials that promote an unrealistically thin ideal, is considered to have some potential for preventing the internalization (Thompson & Heinberg, 1999). The social activism approach attempts to get advertising companies to change their practices so that the public is not constantly surrounded by pictures of unrealistically thin models. Social marketing, or using the media to "sell" a healthy lifestyle, has been shown to have potential for counteracting the internalization of a thin ideal (Thompson & Heinberg, 1999). An intervention that taught participants how to analyze advertisements improved their understanding that those images were unattainable and caused them to take fewer steps to try to attain the image presented in the media (Rabak-Wagner, Eickoff-Shemek, & Kelly-Vance, 1998).

Beside internalization, another mental process that has been linked to body dissatisfaction is social comparison. Social comparison occurs when an individual sees an image and evaluates himself or herself according to the standard set by the image. Social comparison combined with magazine reading and television viewing predicts body

dissatisfaction and eating disturbances (Botta, 2003, 1999). Advertisements are a type of message that particularly encourages comparisons. Though the majority of college females shown appearance-related commercials report increases in anger, depression, and anxiety, those instructed to compare themselves to the ads reported those effects to a greater extent (Cattarin, Thompson, Thomas, & Williams, 2002). Women compare themselves to thin models in ads and find themselves less attractive in comparison (Richings, 1991; Posavac, et al., 1998; Martin & Gentry, 1997; Tiggemann & Slater, 2003). The more attractive the model, the more comparisons women make between themselves and the model (Cattarin, et al., 2000).

Comparison helps to explain why white girls have greater body image disturbances than African American girls, despite the fact that African Americans watch greater amounts of television. Most of the extremely thin models on television are European, and thus African Americans are not as likely to compare themselves to the models. The result is greater body satisfaction among African American girls (Botta, 2000).

Some types of media seem to inspire more comparisons than other types. Those who read health and fitness magazines and practiced social comparisons were found to be more likely than those reading other types to have eating disturbances (Botta, 2003). Exposure to thin commercials was found to increase the amount of self to model comparisons made by subjects, and those making such comparisons demonstrated an increase in anger and depression after viewing (Frisby, 2004).

To help alleviate the problem of body dissatisfaction, some recommend group-based therapy sessions teaching against social comparisons for treatment of those with

body image disturbances (Shaw & Waller, 1995). A semester-long class that taught media literacy improved participants' body satisfaction, but did not change their self-esteem (Springer, Winzelberg, Perkins & Taylor, 1998). Another approach to alleviating the comparisons to thin models and decreases in body satisfaction is to have people view heavier models. When subjects view heavier models, they make self-enhancing comparisons and their body satisfaction improves (Homstrom, 2004). Such self-enhancing comparisons can lead to improved body satisfaction.

Locus of control, or the way an individual sees her life as controlled, also explains how the media has an effect. Viewers with a high external locus of control, or belief that outside forces determine what happens, showed more eating disordered behavior (Fouts & Vaughan, 2002). Similarly, the degree of self-monitoring combined with weight determines what effect the thin images in the media will have (Henderson-King & Henderson-King, 1997). Many variables mediate the effect the media's impact on body dissatisfaction. This may help explain why one study of a single exposure to pictures of thin models did not have a statistically significant impact on the body satisfaction of the subjects (Champion & Furnham, 1999).

Uses and Gratifications Theory

According to uses and gratifications theory, the intended use for the media may impact how much of an effect it has on consumers. It was found that those watching soap operas for entertainment, social utility, or information had more parasocial relationships with the characters than those who watched to just relax, or pass time. Selective perception and involvement with the show predicted parasocial interaction (Kim & Rubin, 1997), which is a strong predictor of eating disorders (Harrison, 1997). Those who

read fashion magazines to learn how to lose weight and to be more popular are at a higher risk for anorexia (Thomsen, McCoy, Gustafson, & Williams, 2002). Fashion magazines not only predicted eating disorders, but they also perpetuated the behaviors. In a series of interviews with anorexic and bulimic patients, many admitted they read dieting and exercise articles to learn how to be better at losing weight after the onset of their disorder (Williams, Thomsen, and McCoy, 2003).

Cultivation Theory

One way of interpreting how and why the media has an effect is to say that media cultivates a particular view toward thinness, more prevalent in heavy viewers. Based on cultivation theory, one study found that increased television viewing related to indicating a desire for a tiny waist with a medium-sized bust. That finding indicates that television cultivates a desire for one particular body type (Harrison, 2003). Overall media exposure has been correlated to eating disorders (Harrison & Cantor, 1997). Girls who watch larger amounts of television have been found to have less of an awareness of the cultural thin ideal, showing that television has cultivated them into thinking of “the ideal” as the norm (Tiggemann, 2003).

Some studies have narrowed the focus of media effects from heavy consumption of media in general to heavy consumption of some types of media. When television and magazines are compared, magazines show more of a correlation with disordered eating (Vaughan & Fouts, 2002; Harrison & Cantor 1997). In men, heavy viewing of television in general relates to a decrease in satisfaction with their appearance (Van den Bulck, 2000). In women, certain types of television shows have had an effect on body dissatisfaction, such as soap operas, serial shows, movies, and shows with thin characters

(Tiggemann & Pickering, 1996; Van den Bulck, 2000). Music videos have been correlated with a drive for thinness, body dissatisfaction, and concern about appearance (Tiggemann & Pickering, 1997; Tiggemann & Slater, 2003; Borzekowski, Robinson, & Killen, 2000). Conversely, the more time spent watching sports, the less body dissatisfaction participants had (Tiggemann & Pickering, 1996).

Viewing thin-depicting commercials has been shown to increase how important boys think appearance is in girls. Thus, the media not only influences those girls directly, but it also influences them by getting the boys to put a greater emphasis on appearance (Hargreaves & Tiggemann, 2003).

Based on cultivation theory, the simplest solution to body dissatisfaction could be to decrease the amount of appearance-related media vulnerable individuals consume.

This leads to the following research question:

RQ 1: Will heavy consumers of media have greater body dissatisfaction than light consumers?

RQ 2: What are the relationships between the types of media consumed and body dissatisfaction?

Gender Issues

Most of the studies documented above have focused on the impact of media on women. Magazines with a female target audience contained articles and advertisements promoting dieting ten and a half more times than magazines intended for males (Anderson & DiDomenico, 1992). Even as young as grade school, girls who were shown objectified pictures of women were more likely to internalize the ideal and reported lower body satisfaction than boys who were shown objectified images of males (Murnen,

Smolak, Mills & Good, 2003). Also, eating disorders are far more prevalent in women (Feingold & Mazzella, 1998). Some have drawn the conclusion from these facts that women are less satisfied with their bodies than men (McCabe & Ricciardelli, 2001). One possible explanation for the differences in study results regarding men and women is that the media is not the source of body image information for men, as it is for women. Although the body image of both genders has been predicted by age, family pressure, and self-esteem, media consumption affected women's body image but not men's (Green & Pritchard 2003).

However, other studies have shown a different pattern. Some emerging evidence suggests that males who read fitness magazines, are more likely to have eating problems (Morry & Staska, 2001). Another explanation for the differences in men and women is that the media has a different ideal for men. For women, thin is in. For men, the ideal is more middle-sized with defined muscles. After being shown sexist ads, girls reported a desire to be smaller, but the boys were split between wanting to be smaller and wanting to be larger, showing a stark difference from the thin ideal for women that smaller is always better (Stanford & McCabe, 1997).

The findings of a study in which women were depicted as sex objects or decorative objects tend to support the theory that the ideal is different for women than it is for men. When rating themselves, women overestimated their own size and expressed that the ideal was smaller, but men underestimated their own size and expressed that the ideal was larger (Lavine, Sweeney, & Wagner, 1999).

Thus, men are a new target group in the study of body dissatisfaction. Studies thus far have led to different theories over whether men are more satisfied with their bodies or

if the ideal portrayed in the media is different for males. It is not clear what the relationships between sex, media consumption, and body dissatisfaction are. Therefore, the third research question is:

RQ 3: Is there any difference between men and women in the type and amount of media consumed?

CHAPTER TWO

METHODS

Participants were students enrolled in two sections of an undergraduate media communication course at a private liberal arts college. Students were given extra credit in the course for keeping a log of their media usage for ten days. After the 10-day media logs were completed, instruments were administered to measure participants' feelings toward their bodies. Participants were classified as heavy or light consumers of media and then body dissatisfaction levels of those individuals within each classification were compared.

Participants

Participants were undergraduate students ($n = 35$) enrolled in two sections of a media literacy course, "Mass Media and Society." Eight of those participants were male, and 27 were female. Of the 35 students who agreed to participate, one female did not keep a log. Participants were given extra credit for participation in the study.

Instruments

Media Logs

Participants were asked to keep a 10-day log of the time spent consuming visually-stimulating media. The logs provided space for participants to record the amount of time they spent watching television, reading magazines, playing video games, and watching movies (see Appendix A). The logs also contained spaces and instructions to record the specific program or article as well as the motivation for that particular use.

Studies measuring media usage have used similar questionnaires with items asking how often participants watched a particular show or read a type of magazine

(Henderson-King & Henderson-King, 1997; Thompsen et al., 2002; Tiggemann, 2003). Other studies have simply asked participants to estimate their amount of time reading magazines or watching television over a period of time, day, week, or month (Botta, 1999; 2002; 2003; Harrison & Cantor, 1997; Harrison, 2000; Stice et al., 2001; Fouts & Vaughan, 2002; Vaughan & Fouts, 2003). The advantage to using logs rather than questionnaires to assess media exposure is that logs are less dependent on accurate memory. This is especially important in this study because of the number of details needed about the amount of time, medium, and type of program or magazine.

Four media categories were listed on the logs, but some students added Internet and/or newspaper categories, so that a total of 6 mediums were measured. Participants self-reported motivation in one of three categories: entertainment, information, or social activity. Some used combinations of these three categories to describe their consumption motivation.

Eating Disorder Inventory Subscales

Two subscales of the Eating Disorder Inventory (Garner, Olmstead, & Polivy, 1983) were used to assess participants' level of disordered eating, which is one way of measuring body dissatisfaction. The two subscales used were the Body Dissatisfaction subscale and the Drive for Thinness subscale. The Eating Disorder Inventory (EDI) is a 64-question instrument with 8 subscales intended to measure the presence of or risk for an eating disorder. The EDI was initially tested in eating-disordered and non-eating disordered women (Garner, et al., 1983).

The Body Dissatisfaction subscale contains nine statements such as "I think that my stomach is too big," and "I think that my thighs are just the right size." Thus, it

measures the cognitive aspect of body image, or what people think about themselves (see Appendix B, questions 36-45). The Drive for Thinness subscale contains seven items such as "I think about dieting," and "I am terrified of gaining weight," to measure how important being thin is to the participant. Participants are instructed to rate each statement always, usually, often, sometimes, rarely, or never based on how true that statement is for them. The scores are given a value 0-3. The three answers that indicate the least body dissatisfaction are scored as 0, and the answer indicating the most dissatisfaction is scored as three. Two points are given to the answer indicating the next-greatest dissatisfaction, and one point is given to the answer indicating the third greatest amount of body dissatisfaction (Garner, et al., 1983).

The instrument was initially tested with a group of anorexic women and a group of control women. The reliability coefficient for the anorexic group was .90, and the reliability coefficient for the female control group was .91 (Garner, et al., 1983). The internal consistency coefficients for all the subscales are .80 or higher (Espelage, et al., 2003). Though initially developed and tested in females, it has been used with adolescent males and females with a reliability of .91 in females and .86 in males (Thompson, 1995). The second edition, EDI-2, contained no changes to the original eight subscales, though it did incorporate three new scales to be used on a trial basis (Espelage, et al., 2003).

Sine the initial development of the EDI for anorexic females, the instrument has been used with different populations. It has been found to be useful as a screening tool in college women for eating disturbances, particularly for body dissatisfaction (Klemchuk, Hutchinson, & Frank, 1990), and continues to be used widely in studies of female body dissatisfaction. The Body Dissatisfaction Subscale was used in elementary students with

a reliability of .84 in females and .72 in males (Wood, Becker, & Thompson, 1996). Other studies of males and females have used the both the Body Dissatisfaction and Drive for Thinness subscales (Harrison & Cantor 1997; Harrison, 2000; Cusumano & Thompson, 1999). In this study Cronbach's Alpha was .85.

Body Esteem Scale

The other instrument used to measure body satisfaction was the Body Esteem Scale (Franzoi & Shields, 1984), which has been previously used with undergraduate students (see Appendix B). The Body Esteem Scale is an instrument developed to measure how men and women feel about their bodies. It is an extension of the Body-Cathexis Scale (Secord & Jourard, 1953), which was the only existing objective measure for body esteem at the time the Body Esteem Scale was developed. It was used in this study because of its similar reliability for both males (.81-.86) and females (.78-.87) (Thompson, 1995).

The 35-item BES instrument contains three subscales for men that assess feelings about physical attractiveness, upper body strength and physical condition. Three subscales for women assess feelings about sexual attractiveness, weight concern, and physical condition. Participants are instructed to respond to items on a five-point likert scale ranging from "Have strong negative feelings" to "Have strong positive feelings."

In previous studies, the internal reliability ranged from .78 to .87 for each of the six subscales. Convergent validity was established by comparing results of the Body Esteem Scale to scores of the same participants on the established Rosenberg Self-Esteem Scale (Franzoli & Shields, 1984). Validity was further established for the BES by comparing scores on subscales with other measures that should relate, such as the amount

of time spent in exercise correlating to the score on the physical condition subscale (Franzoi & Herzog, 1986). The internal consistency for use with adolescents was established at .82 to .94 (Cecil & Stanley, 1997).

Since its establishment, the Body Esteem Scale has been widely used in studies concerning body image and body satisfaction (Irving, 1990; Henderson-King & Henderson-King, 1997; Monteath & McCabe, 1997; Posavac et al., 1998; Groesz et al., 2002; Banfield & McCabe, 2002). In this study, it served as a way of measuring the males' and females' feelings about their bodies in a way that is relevant to their specific sex. The Cronbach Alpha scores for the male subscales ranged from .82-.91 and for the female subscales from .84-.93.

CHAPTER THREE

RESULTS

The purpose of this study was to evaluate the impact of media usage habits on body dissatisfaction. Logs of student media consumption were compared to those students' scores on two measures of body dissatisfaction. Amount of media consumption, type of medium, and motivation for consumption were all measured to search for a link between media usage and body dissatisfaction.

Body Dissatisfaction in Heavy and Light Viewers

The first research question asked whether heavy viewers of media had higher body dissatisfaction than light viewers. The range of total media consumption of the participants revealed a range of 114 minutes to 2550 minutes over the 10 days measured. The daily average consumption of the individuals ranged from 11.4 to 225 minutes of media.

Television was the most commonly consumed medium. All of the respondents recorded some television time. Total television consumption per person ranged from 24 minutes to 2450 minutes over the ten days. Of all the minutes spent watching television combined, 78.9% were recorded as having a motivation of entertainment.

The second-most consumed medium was film. Thirty-one of the participants reported some film consumption in their logs. The individuals' total consumption ranged from 30 minutes to 1166 minutes. Entertainment and social activity were the most common motivations for film viewing. Entertainment was a contributing motivation for 68.9% of all the minutes of film consumption combined, and social activity contributed

to 58.8% of all the minutes of film consumed. Entertainment and social activity were also the most common motivations for video game use. Video game use was reported by 11 participants. 71.0% of their total minutes were attributed to an entertainment motivation, and 51.1% were attributed to social activity.

Sixteen participants reported reading magazines for a total of 757 minutes combined. Of those minutes, 63.4% were the result of a motivation for entertainment, and 48.2% were motivated by information seeking.

The Internet was the medium most used when participants were seeking information. Of the 1965 minutes total reported by 11 participants, 98% were at least in part motivated by information seeking.

The least reported medium was newspaper. Only three participants reported reading papers, two of those were in small amounts (25 and 30 minutes over the 10 days). Those two were motivated by information seeking. One outlier read the paper 140 minutes over ten days for an entertainment motive.

For this study, heavy consumers were those who consumed 101 or more minutes of media a day. Light consumers were classified as those who consumed 100 minutes or less per day. These values were used because they divided the participants into relatively equal numbers of heavy and light consumers and did not exclude any participant. This is different from Gerbner's classification of light viewers as those who watched television for one hour or less per day and heavy viewers as those who watched television for four hours or more a day (Gerbner, Gross, Morgan, & Signorielli, 1984). Only two of the participants in this study consumed four or more hours a day of media, so the heavy and light distinction was set in the middle of the values reported by the participants.

RQ 1 asked whether heavy consumers of media had greater body dissatisfaction than light consumers. This question tests whether cultivation theory can be used to explain the effects that mass media has on body image. Means and *SD* for males' and females' scores on the EDI are shown in Table 1. A univariate analysis showed no statistical significance between overall media consumption and the scores on the EDI, $F(1, 31) = 1.267, p = .269$. Though the difference was not statistically significant, heavy viewers did differ from lighter viewers in the mean EDI score. However, that difference was not in the expected direction. Lighter viewers scored slightly higher on average on the EDI, indicating more eating disordered behavior than the heavier viewers. Means and *SD* of heavy and light viewers' scores on the EDI are shown in Table 2.

Table 1

Average Scores on Eating Disorder Inventory

	<i>n</i>	<i>M</i>	<i>SD</i>
Male	8	44.2500	3.28416
Female	25	49.8800	8.03285

Table 2

Means, Standard Deviations, and Sample Sizes for Eating Disorder Inventory

Media Consumption	<i>n</i>	<i>M</i>	<i>SD</i>
Light	17	49.94	7.55
Heavy	16	47.00	4.45
All Participants	33	48.52	7.53

$F = 1.267$

$p = .269$

Scores on the BES were computed for each of the six subscales. The Means and *SD* of those scores are shown in Table 3. The subscales for men are physical condition, upper body strength, and physical attractiveness. For women, the three subscales are physical condition, sexual attractiveness, and weight concerns. On the BES, lower scores are indicative of increased body dissatisfaction. Means and standard deviation reported in Tables 4 and 5. An ANOVA was computed for each of the subscales, and no statistically significant relationship was found between heavy and light media consumers in body satisfaction. The results are shown in Table 6.

Table 3

Average Scores on Body Esteem Scale

	<i>M</i>	<i>SD</i>
Female (<i>n</i> = 26)		
Physical Condition	29.04	6.88
Sexual Attractiveness	45.35	5.69
Weight Concerns	27.00	8.27
Male (<i>n</i> = 8)		
Physical Condition	48.13	4.70
Upper Body Strength	30.75	5.18
Physical Attractiveness	37.43	5.26

Table 4*Mean, SD, and Sample Sizes of Body Esteem Scale Scores for Heavy Consumers*

	<i>M</i>	<i>SD</i>
Female (<i>n</i> = 15)		
Physical Condition	27.73	6.44
Sexual Attractiveness	45.93	6.75
Weight Concerns	25.67	7.22
Male (<i>n</i> = 3)		
Physical Condition	48.00	5.00
Upper Body Strength	28.67	6.35
Physical Attractiveness	40.00	5.29

Table 5*Mean, SD, and Sample Sizes of Body Esteem Scale Scores for Light Consumers*

	<i>M</i>	<i>SD</i>
Female (<i>n</i> = 11)		
Physical Condition	30.81	7.73
Sexual Attractiveness	44.55	4.34
Weight Concerns	28.82	9.58
Male (<i>n</i> = 5)		
Physical Condition	48.20	5.11
Upper Body Strength	32.00	4.64
Physical Attractiveness	35.50	5.00

Table 6*ANOVA Scores on the Body Esteem Scale Comparing Heavy & Light Consumers*

	<i>df</i>	<i>F</i>	<i>p</i>
Between subjects			
Male			
Physical Condition	1	.003	.959
Upper Body Strength	1	.750	.420
Physical Condition	1	1.325	.303
Female			
Physical Condition	1	1.289	.27
Sexual Attractiveness	1	.355	.56
Weight Concerns	1	.918	.35
Within Subjects			
Male			
Physical Condition	6	.003	.96
Upper Body Strength	6	.750	.42
Physical Condition	6	1.325	.30
Female			
Physical Condition	24	1.289	.27
Sexual Attractiveness	24	.355	.56
Weight Concerns	24	.918	.35

Body Dissatisfaction and Type of Media

The second research question was concerned with whether there is a relationship between the types of media consumed and the levels of body dissatisfaction. A correlation matrix showed some statistically significant relationships between the types of media consumed and scores on the body dissatisfaction measures. Specifically, magazine consumption was related to lower scores on the upper body strength subscale for men on the BES. Though non significant, the scores on the EDI were lower for men who spent more time reading magazines. The lower scores on the EDI show less disordered eating, so it is surprising that men who read more magazines were less satisfied with their bodies but also showed less disordered eating. The correlations are shown in Table 7.

Table 7

Correlations between Types of Media and Body Satisfaction Scores

	Television	Video Games	Film	Magazine	Internet	Newspaper
Male						
Physical Condition	-.050	-.371	.176	-.096	-.196	-.391
Upper Body Strength	.166	.051	.438	-.718*	-.110	.074
Physical Attractiveness	.067	-.547	.250	.209	-.727	-7.07
Female						
Physical Condition	-.201	-.007	.336	.053	-.102	-.238
Sexual Attractiveness	-.189	-.054	-.130	-.098	.169	-.188
Weight Concerns	.101	.271	.125	.304	-.102	.099
EDI	-.280	-.070	-.049	-.190	.003	-.071

* $p < 0.05$

Media Consumption of Males and Females

The third research question asked whether there is a difference in the media usage of men and women, specifically whether the sexes differ in the amount and type of media consumed. A univariate analysis revealed that that men spend significantly more time watching television, $F(1,32) = 6.432, p = .016$, and reading newspapers, $F(1,32) = 4.196, p = .049$. Although the other relationships were not significant, men spent more time with video games. Women spent more time watching films, reading magazines, and using the internet. Mean amounts of media consumed are shown in Table 8.

Table 8

Mean Amount of Media Consumed (in minutes)

	Television	Video Games	Film	Magazine	Internet	Newspapers	Total
Male	985.63*	102.50	200.50	18.13	40.00	20.63*	1867.38
Women	491.58*	44.04	406.12	22.19	66.12	1.15*	1031.19

* $p < .05$

CHAPTER FOUR

DISCUSSION

This study examined the relationship between media consumption and body image. Previous research has shown that many people are dissatisfied with their bodies and that body dissatisfaction is associated with various things that negatively impact interpersonal and relational functioning. Mass media has been studied as a source of body dissatisfaction because it promotes thinness.

Body Dissatisfaction in Heavy and Light Viewers

Previous research demonstrated a correlation between media consumption and body dissatisfaction. Greater media consumption (particularly television and magazines) related to greater body dissatisfaction. The trends shown in these studies led to the first research question, which asked if there was a difference between heavy and light consumers of media in body dissatisfaction. The present study addressed the impact of several types of media in addition to the amount of media consumed.

In Gerbner's research on television viewing habits in adults, he labeled those who watched television for four or more hours a day as heavy viewers. In cultivation research, those viewers are impacted more negatively than light viewers in their perceptions of themselves and of the world.

In this study, only two participants consumed more than four hours of media a day. There was no statistically significant difference in the EDI scores of heavy and light consumers of media, nor were there any significant differences between heavy and light viewers in scores on the subscales of the BES. Although not significantly different, the mean EDI score of light viewers showed more disordered eating than the scores for heavy

viewers. This finding was contrary to what would be expected based on the majority of previous research, but a few studies did find that viewing thin images had a positive effect on participants.

A number of factors must be considered as to why the present study did not find a significant difference between the body satisfaction in heavy and light media use. First, the overall sample size was small, and therefore lacked power to detect small effects. Another potential explanation for the lack of distinguishable differences between heavy and light viewers might be that only two participants in the present study consumed more than four hours of media a day. Many of the participants in the “heavy” category were actually medium viewers according to the categories that emerged from the original cultivation research. A larger sample size would be more like to demonstrate reliable differences in the body satisfaction of those who are truly light (less than one hour a day) and heavy (more than four hours a day) media consumers if they do in fact exist

Another possible explanation for the lack of significant difference between the body satisfaction of heavy and light viewers could be that the participants in this sample had high initial body satisfaction. Initial body satisfaction has been shown to affect how much effect the media has on a person’s body satisfaction. Additionally, media literacy has been found to counter the impact of the media on body image. The participants for this study were all taking a media communication class that could have sensitized them to issues of media messages and influence. They may have been more equipped than the average individual to critically evaluate the messages they were consuming and thus were less affected by those messages. Use of a control group in subsequent studies would

allow for testing whether media literacy impacts the effect the media has on an individual.

Body Dissatisfaction and Type of Media

Limited comparisons of types of media and types of texts within a medium have been shown in previous research. Magazines may have more of an effect on body dissatisfaction than television. Fashion, beauty, health, and fitness magazines were found to have the most powerful effect. Several specific types of television shows, such as soap operas, serial shows, movies, and shows with thin characters, as well as shows that feature fat characters, have also been linked to body dissatisfaction.

The second research question in this study asked what were the relationships between the types of media consumed and body dissatisfaction. The media logs given to participants indicated their use of television, video games, film, magazines, newspapers, and the Internet. The amount of time spent reading magazines was significantly associated with reports of less satisfaction with physical condition and upper body strength in males on the BES. This finding is consistent with the research that found magazines had the most impact on body image.

No other significant relationships between types of media and body dissatisfaction were found. Again, this might be due to the small sample size, the lack of truly heavy viewers, and the participants' media literacy. Another limitation was that the logs did not differentiate between active and passive viewing. Students in this study may have actually consumed much more media but not recorded it because they were not specifically giving it their attention. Such consumption without attention is referred to as

passive viewing, and there is some evidence that passive viewers are more vulnerable to the media's effects.

Another possible explanation for the lack of significant findings might be that the students in the present sample did not consume media passively. Research has shown that college students have a particular way of watching television that is characterized as "appointment viewers," meaning that they select specific shows and then watch them on a regular basis. Appointment viewing is classified as active because the viewers are making a conscious choice to view the program.

The most common motivation reported for using the media was entertainment. Social activity was also a common motivating factor for film and video games. The medium most used to gather information was the Internet. All of these motivations are active because they involve specifically choosing to consume the medium. The potentially least active of the motivations recorded (entertainment, information, and social activity) would be social activity because the other people in the group influence what media is consumed, not just the individual. The results of this study indicate that the media's effects on body dissatisfaction may be more likely to be influenced by the motivation. This finding is supported by uses and gratifications research, which has shown that the motivation for consuming media has more of an impact than the total amount of media consumed on the effect that a message has on an individual. Future research should compare college students with other young adults not only for amounts of active and passive media consumption but also how motivation for media use impacts body image.

Media Consumption of Males and Females

Previous research findings have been divided as to whether the media affects the body dissatisfaction of both men and women. Some studies have shown that body dissatisfaction is more of a problem for women, but others have shown that body dissatisfaction is a growing problem for men also. Women have been found to be less satisfied with their bodies and to have higher rates of eating disorders than men. One possible explanation for the difference between males and females is that the media directs messages of the ideal body more to women. Another explanation for the difference is that men are dissatisfied with their bodies, but the ideal for them is different than it is for the women.

The third research question was whether men and women differed in their media usage. A possible explanation for the differences demonstrated in existing research in levels of body dissatisfaction and disordered eating in males and females might be that one sex consumes more or less of a type of media that has a particular impact on body dissatisfaction. The males in this study spent significantly more time watching television and reading newspapers than the females. Though not statistically significant, the women spent more time watching film, reading magazines, and using the Internet. Further research is needed to determine whether these differences in media habits could explain the differences in prevalence of eating disorders and body dissatisfaction.

Body dissatisfaction is a growing problem with serious personal and relational consequences. This study examined the role the media plays in cultivating a desire for an unrealistic "ideal" body type. A clear relationship between media use and body satisfaction was not found. However, the study does identify important areas for future

research for a better understanding of the effects of mass media on body image. It raises questions as to whether there is a difference in media effects on truly heavy and light viewers, whether media literacy will limit the media's effects, whether passive viewers are more vulnerable to media effects, and whether differences in media consumption between males and females could be related to differences in body dissatisfaction. Body dissatisfaction is a serious problem, and a better understanding of the media's role in affecting it will be helpful in designing interventions to prevent or improve it.

APPENDIX B: BODY DISSATISFACTION INSTRUMENTS

The following is a list of aspects of your body. Please circle the number that best describes how you feel about each aspect of your body according to the scale:

1- Have strong negative feelings, 2- Have moderate negative feelings, 3- Have no feeling one way or the other, 4- Have moderate positive feelings, 5- Have strong positive feelings

Remember, there are no right or wrong answers.

	Strong Negative Feelings				Strong Positive Feelings
1. Body scent	1	2	3	4	5
2. Appetite	1	2	3	4	5
3. Nose	1	2	3	4	5
4. Physical stamina	1	2	3	4	5
5. Reflexes	1	2	3	4	5
6. Lips	1	2	3	4	5
7. Muscular strength	1	2	3	4	5
8. Waist	1	2	3	4	5
9. Energy level	1	2	3	4	5
10. Thighs	1	2	3	4	5
11. Ears	1	2	3	4	5
12. Biceps	1	2	3	4	5
13. Chin	1	2	3	4	5
14. Body build	1	2	3	4	5
15. Physical coordination	1	2	3	4	5
16. Buttocks	1	2	3	4	5
17. Agility	1	2	3	4	5
18. Width of shoulders	1	2	3	4	5
19. Arms	1	2	3	4	5
20. Chest or breasts	1	2	3	4	5
21. Appearance of eyes	1	2	3	4	5
22. Cheeks/cheekbones	1	2	3	4	5
23. Hips	1	2	3	4	5
24. Legs	1	2	3	4	5
25. Figure or physique	1	2	3	4	5

26.	Sex drive	1	2	3	4	5
27.	Feet	1	2	3	4	5
28.	Sex organs	1	2	3	4	5
29.	Appearance of stomach	1	2	3	4	5
30.	Health	1	2	3	4	5
31.	Sex activities	1	2	3	4	5
32.	Body hair	1	2	3	4	5
33.	Physical condition	1	2	3	4	5
34.	Face	1	2	3	4	5
35.	Weight	1	2	3	4	5

Below is a list of statements. Please consider each statement and circle the number that best applies to you according to the scale:

1- never 2- rarely 3- sometimes 4- often 5-usually 6-
always

Remember, there are no right or wrong answers.

	Never	Rarely	Sometimes	Often	Usually	Always
36. I think that my stomach is too big.	1	2	3	4	5	6
37. I think that my thighs are too large.	1	2	3	4	5	6
38. I think that my stomach is just the right size.	1	2	3	4	5	6
39. I feel satisfied with the shape of my body.	1	2	3	4	5	6
40. I like the shape of my buttocks.	1	2	3	4	5	6
41. I think my hips are too big.	1	2	3	4	5	6
42. I think that my thighs are just the right size.	1	2	3	4	5	6
43. I think my buttocks are too large.	1	2	3	4	5	6
44. I think that my hips are just the right size.	1	2	3	4	5	6
45. I eat sweets and carbohydrates without feeling nervous.	1	2	3	4	5	6
46. I think about dieting.	1	2	3	4	5	6
47. I feel extremely guilty after overeating.	1	2	3	4	5	6
48. I am terrified of gaining weight.	1	2	3	4	5	6
49. I exaggerate or magnify the importance of weight.	1	2	3	4	5	6
50. I am preoccupied with the desire to be thinner.	1	2	3	4	5	6

51. If I gain a pound, I worry that I will keep gaining. 1 2 3 4 5 6

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