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THE MEDIA'S INFLUENCE ON ADOLESCENT BODY DISSATISFACTION

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THE MEDIA'S INFLUENCE ON ADOLESCENT BODY DISSATISFACTION

By

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ABSTRACT

THE MEDIA'S INFLUENCE ON ADOLESCENT BODY DISSATISFACTION

By

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The central aim of this study was to examine the effect of media exposure on adolescent body dissatisfaction. Three hundred and eighty-two students enrolled in 9th and 10th grade level courses at public high schools were surveyed about their television viewing and magazine reading habits, diet and exercise behaviors, and their evaluations of their bodies. For the entire sample, the viewing of a selection of 17 television shows chosen for their emphasis of the ideal body stereotype as well as viewing soaps were significantly positively correlated with body dissatisfaction. For female respondents, watching music videos, reading fashion magazines, and identification with female television stars and fashion models were significantly positively correlated with body dissatisfaction. For male respondents, identification with male television stars and athletes was significantly positively correlated with body dissatisfaction.

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Chapter One

INTRODUCTION

Body shape ideals have varied widely over time (Cogan, Bhalla, Sefa-Dedeh, & Rothblum, 1996). In the United States, slim, muscular body types are currently idealized, but they have not always been desired (Cogan et al., 1996; Rothblum, 1990). Prior to the twentieth century, a larger body size was idealized because it was associated with abundance and wealth (Cassidy, 1991; Sobal, 1991). Throughout the 1900s, however, increasingly slimmer figures have been established as the perfect body type in the United States, partially because of a shift in the way wealth became flaunted (Cogan et al., 1996). Higher socioeconomic status came to be associated with self-control and denial of one's body, in order to obtain a thin figure (Brumberg, 1988).

While these current emphases on weight control and muscle development have led to a more health-conscious society, negative impacts have emerged as well. In the United States today, research indicates that people are becoming increasingly dissatisfied with their bodies, and that the number of eating disorders reported is growing at an alarming rate. In a 1993 national survey of 803 women between the ages of 18 and 70, nearly 50 percent negatively evaluated their appearance and reported concern about being or becoming overweight (Cash & Henry, 1995). When compared with a

similar survey conducted on the national level in 1985 (Cash, Winstead, & Janda, 1986), this figure represented an increase of 18 percent.

Adolescents are particularly at risk of experiencing body dissatisfaction and engaging in eating disorder behaviors because the onset of puberty leads to increased concerns about the physical changes of their bodies (Lauber, 1982). The way they think about their bodies is changing. Schilder (1950) suggests that adolescents have fluid body images which develop as they learn about their bodies through life experiences, and that it is not until they move into adulthood that their perceptions of their bodies become more stable. Thus, adolescents are especially vulnerable to the body stereotypes idealized in our society.

Research indicates that adolescent body dissatisfaction is a widespread problem. One study (Felts, Tavasso, Chenier, & Dunn, 1992) reported that of more than 3,000 high school students, 25 percent thought they were too fat and 68 percent were trying to lose weight. The pressure to improve one's figure is evident. In a survey of more than 2,000 high school students, Newman (1991) found that 29 percent of females and 17 percent of males said they were too fat; and while 61 percent claimed that their weight was just about right, only 34 percent reported they were not doing something to change their weight. Brumberg (1997) reports an even more disturbing statistic: "By age thirteen, 53 percent of American girls are unhappy with their bodies; by age seventeen, 78 percent are dissatisfied" (p. xxiv).

When considering the prevalence of this dissatisfaction, certain questions must be raised. Why are people increasingly unhappy with the shape of their bodies? What influential sources convince them they need to improve their figures? Researchers theorize that sociocultural factors are largely responsible for these high levels of body dissatisfaction and the increasing number of eating disorders reported in our society, particularly among women (Rodin, Silberstein, & Striegel-Moore, 1985; Fallon, 1990; Thompson & Heinberg, 1993). Current societal standards of attractiveness overly emphasize the desirability of a thin, muscular figure (Tiggemann & Pickering, 1996). Because the media are among the most influential conveyors of these sociocultural ideals, it is important to determine whether they play a causal role (Silverstein, Perdue, Peterson, & Kelly, 1986; Anderson & DiDomenico, 1992).

Because adolescents consume large quantities of media which uphold these current standards of attractiveness--including television, movies, and magazines--it is important to question whether they apply these standards to their own bodies. There has been considerable research examining body dissatisfaction, but these studies have almost solely focused on adult, female subjects and few have examined the media as a source of influence. The purpose of this thesis is to expand on previous findings by investigating the relationship between the media and both female and male adolescents' dissatisfaction with their bodies. This study will involve two parts. First, we will examine the degree to which media usage correlates with body

dissatisfaction and other related variables. Second, to explore this topic in a larger context, we will examine the media's impact when controlling for other significant predictors of body dissatisfaction.

Chapter Two

REVIEW OF LITERATURE

When considering the prevalence of body dissatisfaction and eating disordered behaviors among both women and men, it is logical to question what is causing these widespread problems. Researchers have examined various factors that correlate with body dissatisfaction. These predictors can be categorized into three groups: physical, societal, and behavioral variables.

PHYSICAL CHARACTERISTICS AND BODY DISSATISFACTION

One group of variables that has been identified as a predictor of body dissatisfaction is physical characteristics. Researchers have examined the degree to which such factors as age, body type, gender, and race impact people's evaluations of their bodies.

Age. While age has been demonstrated to correlate with body dissatisfaction, research findings are not consistent. In Cash and Henry's (1995) national survey, they found that women in the 18-24 year-old age group had a more favorable body image than did the older age groups. However, in a study of women between the ages of 17 and 48, Dionne, Davis, Fox, and Gurevich (1995) found their younger respondents to report significantly more body dissatisfaction than did the older ones. The difference in findings may be due to measurement of the dissatisfaction concept. The respondents in Cash and Henry's study gave a general evaluation of their

bodies, while those in Dionne et al.'s study rated their specific body dissatisfaction. Younger women were significantly more dissatisfied with their hips, buttocks, and thighs when compared to older women.

Body type. A second physical characteristic that researchers have identified as a predictor of body dissatisfaction is body type, or body composition. This variable can be measured in numerous ways; one of the most common is the Body Mass Index (BMI). The Body Mass Index is considered the most valid and reliable of weight indices, as it is the most correlated with independent measures of body fat (Keys, Findanza, Karvonen, Kimura, & Taylor, 1972). It is calculated by dividing weight (kilograms) by height (meters^2). Generally, normal weight ranges fall between indices of 19 and 24, while a score of 25 or more is considered overweight. In Dionne et al.'s (1995) study of women between the ages of 17 and 48, they found that BMI was positively correlated with body dissatisfaction. Mortenson, Hoerr, and Garner's (1993) study of female undergraduates supports these findings: Those respondents with lower BMIs were significantly more satisfied with their bodies.

Research using male subjects to examine this issue indicates that men are similarly affected by their body composition. Blouin and Goldfield (1995) compared the association between body image and eating-related attitudes among male body builders, runners, and martial artists. Bodybuilders were significantly heavier than martial artists and runners, and reported significantly higher body dissatisfaction and lower self-esteem.

A second study identified male body dissatisfaction among a normal sample. Huddy, Nieman, and Johnson (1993) compared varsity athletes and non-athletes (defined as people not engaged in a regular exercise regimen) at the college level for body image and percent body fat. There was a significant negative correlation between percent body fat and body image for the non-athletes, suggesting that lack of regular exercise may contribute to body dissatisfaction.

Race. A third physical characteristic that researchers have examined to a limited extent is race. Cash and Henry's (1995) national survey found that African Americans had significantly more positive body images than Caucasian or Hispanic women. Felts et al. (1992) also identified race as a significant predictor. In their survey of high school students, Caucasian females were significantly more likely to think of themselves as overweight and were more likely to be trying to lose weight than were African American females.

Another study investigated this issue from a different perspective. In their survey of undergraduates regarding body type preferences and characteristics, Jackson and McGill (1996) found that African American males preferred larger female body types. They also associated less unfavorable characteristics (e.g., lazy, uneducated) with obese females and were more likely to associate positive characteristics (e.g., attractive, generous) with obese females than were Caucasian males. Caucasian males considered a slim figure to be more important for females than did African American males.

While females of both races preferred a slightly thin body type for males, African American females associated less unfavorable characteristics with obese males than did Caucasian females. Being unsexy was strongly associated with obesity by Caucasian respondents of both genders, but not by African American respondents. Caucasians also associated obesity with unhealthiness in females.

Research on physical characteristics as predictors of body dissatisfaction has yielded the following findings: (1) that age may both positively and negatively impact women's evaluations of their bodies; (2) that people who are thinner and/or have less body fat are more satisfied with their bodies; and (3) that Caucasian women, relative to women of other races, are less satisfied with their bodies. These findings lead to the first hypothesis:

H1: Body type (as measured by the Body Mass Index) is positively correlated with body dissatisfaction.

SOCIETY AND BODY DISSATISFACTION

A second group of variables that has been identified as predicting body dissatisfaction is societal variables. Researchers have examined the influence of interpersonal sources, such as family, friends, and peers, as well as the impact of culture on people's evaluations of their bodies.

Interpersonal sources. Heinberg and Thompson (1992) asked women and men to rate the importance of different entities on their appearance. Respondents grouped these entities into three levels: The first and most influential were their friends, while classmates, other students at their school,

and celebrities were on the second level, and their families and the general public fell on the third or least important level. Researchers have focused on the influence of two of these groups: friends and family.

One study (Crandall, 1988) looked at the influence of social groups on an eating disordered behavior (binge eating) in two college sororities. In the first sorority, she found that the more a woman binged, the more popular she was among her sorority sisters. In the second sorority, popularity was also associated with bingeing, and Crandall identified a high level of peer pressure among the sorority members: By the end of the academic year, a sorority member's binge eating could be predicted from the binge eating level of her friends. And, as friendship groups grew more cohesive, a sorority member's binge eating grew increasingly similar to that of her friends.

The influence of family on eating disordered behavior has also been examined. Through their interviews with 77 mother and daughter pairs, Pike and Rodin (1991) found that mothers of daughters with eating disorders were significantly different than other mothers on certain characteristics. First, they were more dissatisfied with the general functioning of their family system. Second, the mothers themselves reported more eating disordered behaviors, and differed in diet history compared to the other mothers. Third, they thought their daughters should lose more weight than the other mothers and believed that their girls were less attractive than the girls judged themselves.

Culture. A second societal variable that significantly affects people's evaluations of their bodies is culture. Research indicates that body dissatisfaction may be a culturally-bound syndrome. Studies conducted over the past fifteen years examining this issue report virtually the same results: First, that women who are exposed to western culture ideals tend to be more dissatisfied with their figures and strive to be thinner; and second, that men in western cultures also show a greater degree of body dissatisfaction and idealize thinner female body types.

One area of cross-cultural research contrasts levels of body dissatisfaction and propensity for eating disorders in various nations. Using Ugandan and British undergraduates as their subjects, Furnham and Baguma (1994) examined the differences in evaluation of body shapes in east and west cultures. They found that the British students preferred thinner female figures, while the Ugandans rated larger female figures as attractive. The Ugandans also rated the larger body types as healthy, while the British students believed that these figures were unhealthy.

Cogan et al. (1996) studied Ghanaian undergraduates, comparing their attitudes about weight and body consciousness to those of American undergraduates. They found that American students (particularly females) were more likely than the Ghanaian students to have dieted. American females also scored significantly higher on scales that measured eating-disordered behavior, restraint, and experiencing weight as a social

interference. Like the Ugandans in Furnham and Baguma's (1994) study, the Ghanaian students also rated larger body types as ideal.

Another comparison study (Tiggemann & Rothblum, 1988) investigated American and Australian undergraduates' attitudes about body weight and appearance. While only 20 percent of the sample was overweight, 50 percent of the subjects perceived themselves to be overweight. Weight was a much bigger issue for both Australian and American women when compared to the male respondents; they dieted more, expressed more weight concerns, were more body conscious, and reported that their weight had interfered more with social activities. However, the American students reported more body consciousness and preoccupation with weight than did the Australian students.

Other research indicates that exposure to western culture can change women's body type ideals and increase their propensity for developing eating disorders. Furnham and Alibhai (1983) examined Kenyan Asian and Kenyan British females' perceptions of body image. They discovered that the Kenyan Asians rated larger body types positively, while the Kenyan British evaluated the same shapes negatively. These findings indicate that exposure to British (western) values may influence women's perceptions of ideal body weight (Nasser, 1988).

Other studies support Furnham and Alibhai's results. For example, Mumford, Whitehouse, and Choudry (1992) examined schoolgirls in Lahore, Pakistan. While they found that the Pakistani girls exhibited similar eating

problems and dissatisfaction with body shape as compared to girls in western cultures, the girls that displayed these problems tended to be "westernized." Degree of westernization was measured by consumption of western food and speaking English in the home.

Fichter, Weyerer, Sourdi, and Sourdi (1983) found higher incidences of anorexia nervosa among Greek girls in Munich than among Greek girls in Greece, supporting the theory that exposure to a more westernized culture leads to greater concern with body image. Similarly, Nasser (1986) compared samples of Arab female students attending school in London and Arab female students attending school in Cairo. He identified six cases of bulimia in the London sample, while none were found in the Cairo sample.

Thus, the research on societal variables indicates that both interpersonal sources and culture have significant impacts on body dissatisfaction. Both friends and family have been identified as significant influences on women's evaluations of their bodies. Also, exposure to western culture ideals has been demonstrated to negatively impact body satisfaction. From these findings, a second hypothesis is formulated:

H2: Positive evaluations by interpersonal sources important to the respondent negatively correlate with the respondent's degree of body dissatisfaction.

MEDIA USAGE AND BODY DISSATISFACTION

Finally, researchers have examined the relationship between media usage and body dissatisfaction. When reviewing the research examining this variable, it is important first to consider what images the media present that contribute to body dissatisfaction. Content analyses of body types found in both magazines and on television have been conducted.

Content analyses of popular magazines demonstrate that the ideal female body type has become increasingly slimmer throughout the twentieth century. Garner, Garfinkel, Schwartz, and Thompson (1980) found that *Playboy* centerfolds became significantly thinner between 1960 and 1979. An update of this study (Wiseman, Gray, Mosimann, & Ahrens, 1990) demonstrated that this trend continued between 1979 and 1988. Wiseman et al. reported that 69 percent of *Playboy* centerfold models were at least 15 percent under normal weight as defined by actuarial tables. Other studies have identified additional body-related themes, including the disproportionate number of under weight, Caucasian models that are portrayed, and the growing number of diet and figure improvement articles and advertisements featured in both men's and women's magazines.

A subset of research focuses on teen magazines, and indicates that readers of such magazines are bombarded with images of slender, Caucasian models who emphasize the importance of appearance. Evans, Rutberg, Sather, and Turner (1991) content analyzed ten issues each of *Sassy*, *Seventeen*, and *Young Miss* (name has since been changed to *Young and*

Modern, or *YM*) from January 1988 to March 1989. For the total sample, the mean ad space was 46 percent (*Seventeen*=57%, *Young Miss*=42%, *Sassy*=38%). Advertisements for appearance-related products predominated (21% were for beauty care products and 11% were fashion-related), followed by miscellaneous music, entertainment, and personal services (7%), health and hygiene (4%), and education or career-oriented ads (3%). The majority of the magazines' models were white females (65%), followed by white males (25%), non-white females (8%), and non-white males (3%).

A second teen magazine study focused on the non-advertising content. Pierce (1990) analyzed each issue of *Seventeen* for the years 1961, 1972, and 1985 to determine the content and whether it has changed. In 1961, 37 percent of 2373 pages were not ads, in 1972, 32 percent of 2504 pages were not ads, and in 1985, 41 percent of 2540 pages were not ads. Articles about appearance dominated *Seventeen* in each year (48% in 1961, 52% in 1972, and 46% in 1985), followed by home, male-female relations, and self-development.

Content analyses of adult magazines reveal a high level of figure enhancement and diet product advertisements. For example, Snow and Harris (1986) analyzed weight and diet-related content in *Ladies' Home Journal*, *McCall's*, *Good Housekeeping*, *Glamour*, and *Seventeen* between 1950 and 1983. Of 1,134 relevant ads, 32 percent were for non-ingestible slimming products and devices, 34 percent were for ingestible diet products, and 17 percent were for products which had no weight loss value, but stressed thinness. In contrast, only two percent were for products specifically for the

"full figure," one percent were for anti-diet or weight-gain products, and in just 14 percent, models rated as overweight were portrayed.

Also identified was a significant increase over the years in the number of ads per issue for diet-related products in *Seventeen* and *Glamour* (whose target audiences are teens and women in their twenties), in the number of articles dealing with weight-loss diets, and in the total number of pages given to diet-related articles per issue. Finally, an increase was also found in the number of times weight loss diets were mentioned in the headlines of the covers of all the magazines. In the advertisements sampled, 75 percent of the female models were considered to be either under weight or normal weight. Like Evans et al.'s (1991) study of teen magazines, the overwhelming majority of models were Caucasian (84%). Also, the minority models were significantly heavier than the Caucasian models.

Some studies have included men's magazines in their analysis. Nemeroff, Stein, Diehl, and Smilack (1994) compared women's and men's magazines that fell into three different categories: "traditional" (*Ladies' Home Journal, Good Housekeeping,* and *Playboy*), "fashion" (*Glamour, Cosmopolitan,* and *Gentleman's Quarterly*), and "modern" magazines (*New Woman, Ms.,* and *Esquire*), choosing six issues from each year between 1980 and 1991. They found weight loss, beauty, fitness, and health-related content significantly more often in women's magazines. However, there was a significant increase in weight loss content in the men's magazines across the time period studied.

Another comparison study (Silverstein, Perdue, Peterson, & Kelly, 1986) found that popular women's magazines contained over 200 percent more ads for diet foods when contrasted with men's magazines. This difference also was found when comparing the amount of ads for nonfood figure-enhancing products in women's magazines with those in the men's. Such analyses indicate that the media make issues such as dieting and improving one's figure salient for females.

A third study (Petrie, Austin, Crowley, Helmcamp, Johnson, Lester, Rogers, Turner, & Walbrick, 1996) focused solely on the men's magazines *Esquire* and *Gentlemen's Quarterly* across a 32 year period (1960-1992). Petrie et al. found that while the number of messages concerning physical fitness and health increased, messages regarding weight and beauty decreased since the late 1970s. Also, there was not a significant change in male models' body sizes since the 1960s.

The limited research that exists investigating the relationship between magazine readership and body dissatisfaction indicates that the media may play an influential role. For example, Newman and Dodd (1995) found a negative correlation between self-esteem and reading of sports magazines and television and movie guides for both male and female undergraduates.

Other researchers have exposed subjects to magazine pictures and then measured their dissatisfaction. In a study comparing eating disordered and normal women, Waller, Hamilton, and Shaw (1992) exposed subjects to pictures from women's fashion magazines portraying female models or

pictures of beautiful houses from home magazines. Eating disordered women overestimated their body dimensions significantly more than did the normal women after viewing the fashion magazine pictures. In general, more abnormal eating attitudes were associated with a greater tendency to respond negatively to the fashion images.

However, Stice and Shaw (1994) identified the negative effects of viewing magazine pictures among a normal sample. After exposing female undergraduates to magazine pictures of ultra-thin models, average-sized models, or pictures containing no people, they found that exposure to the thin ideal, as compared to the average-weight models or pictures containing no people, produced more depression, stress, guilt, shame, insecurity, and body dissatisfaction.

A paucity of research exists analyzing body types portrayed on television. The one published study is from the early 1980s. Perdue and Silverstein (1985) looked at the top 40 shows (as determined by the Nielsen ratings from March 21, 1982). They rated 221 characters (139 men and 82 women), finding that women characters were significantly younger and thinner than men.

Research examining the effects of television has consistently shown a positive correlation between television viewing and body dissatisfaction. For example, Myers and Biocca (1992) found that watching just one half-hour of body-image-oriented television programming (e.g., programming focused on

the display of thin female bodies) significantly increased women's dissatisfaction with their figures.

Heinberg and Thompson (1995) reported a similar finding in a study where they exposed female undergraduates to either appearance-related commercials (demonstrating societally-endorsed images of thinness and attractiveness) or non-appearance-related advertisements. Subjects reporting high levels of body dissatisfaction who viewed appearance ads became significantly more depressed following exposure to the appearance ads, when compared to those who viewed non-appearance ads. They also reported becoming more dissatisfied with their appearance after viewing the appearance commercials. The other respondents showed no change on the dependent measures regardless of what they viewed.

Another study (McMullen, 1984) identified television's effects among both men and women. In a survey of college undergraduates, McMullen found that regular viewing of popular television programming (defined as the top 20 shows in the Nielsen ratings for that time period) was positively correlated with depression after viewing physically attractive television characters.

Heinberg and Thompson (1992) examined more closely this impact of media characters on people's evaluations of their bodies. They found that women who rated celebrities as strong influences on their appearance were significantly more dissatisfied with their bodies and exhibited more eating-disordered behaviors.

Using a structural equation model, Stice, Schupak-Neuberg, Shaw, and Stein (1994) examined mediating factors in the relationship between media exposure and eating disorder symptoms. In their survey of undergraduate women, they found that while media exposure (to television and magazines) was significantly correlated with eating disorder symptoms, several factors mediated this effect. Endorsement of traditional gender roles and ideal body type internalization increased this effect, while body satisfaction decreased it. The researchers concluded that women may model disordered eating behavior portrayed in the media, such as fasting, purging, and dieting.

In a survey of college undergraduates about their media use (of television and magazines) and their attitudes about dieting and their appearance, Harrison and Cantor (1997) expanded on Stice et al.'s findings by including males in their sample. Their results showed that media use predicted disordered-eating symptomatology, drive for thinness, and body dissatisfaction in women. And for men, media use predicted endorsement of personal thinness and dieting, and favorable attitudes toward thinness and dieting for women.

The few studies that exist using adolescent respondents report similar findings. Tiggemann and Pickering (1996) measured the effect of TV viewing on adolescent females' body dissatisfaction and drive for thinness. Respondents were asked how much and what type of television they watched the previous week. While overall television viewing was not correlated with body dissatisfaction or drive for thinness, type of program was correlated.

Body dissatisfaction was positively correlated with the amount of time spent watching soaps and movies on television, while it was negatively correlated with sports viewing. Drive for thinness was correlated with time spent watching music videos.

A second study of adolescents (Carbonneau, Haring, Brown, Ferguson, & Chambliss, 1993) identified the negative impacts of their idealization of television. Carbonneau et al. reported a significant correlation between body dissatisfaction and wishing one's own life was more similar to television.

The research on media effects reveals several factors which influence body dissatisfaction. At a basic level, exposure to both magazines and television has been demonstrated to impact people's evaluations of their bodies. However, researchers have taken these findings a step further by investigating the influence of related factors on body dissatisfaction, such as admiration of media characters and the internalization of the stereotypical body type idealized by the media. These findings provide the basis for a final set of hypotheses, which can be explained by using social learning theory.

INTEGRATION OF THEORY AND HYPOTHESES

To provide a theoretical grounding for this study, the principles of social learning theory will be used. According to Bandura (1977), we "acquire attitudes, emotional responses, and new styles of conduct through filmed and televised [models]" (p. 39). If these models are reinforced, it is likely that we will mimic them. In the context of this study, adolescents may compare themselves to media figures who are rewarded for their appearance. If they

do not feel they resemble these models, they may be dissatisfied and attempt to become more like them.

Traditional learning theorists proposed that we acquire attitudes and behaviors through direct experience--that is, we respond to our environments and then "experience the effects" (Tan, 1985, p. 243). If we are rewarded for these responses, we are likely to repeat them. Bandura expanded on this theory by suggesting that we can learn from observing others (models) as well as through direct experience (Tan, 1985). Thus, social learning theory is relevant to the study of media effects because the media offer an easily accessible source of attractive models (DeFleur & Ball-Rokeach, 1989). Tan (1985) outlines four major elements in social learning theory:

1. Attentional processes: The media become a social learning tool when they are able to gain the attention of their audience. Acquiring the audience's attention will most likely occur if the media are simple, prevalent, useful (e.g., they provide a strategy or a solution to life's problems), and positive (they make whatever is being modeled attractive) (Griffin, 1991). Behaviors are learned through observation, while attitudes and beliefs are acquired through "abstract" modeling.

2. Retention processes: Observed behaviors and attitudes will not be modeled unless people remember them. Thus, our observations need to be stored in our minds so that when an appropriate situation arises, we are able to retrieve the proper responses. Bandura (1977) theorizes that we represent events in our minds through two systems, imaginal and verbal. Imaginal

representation involves storing a mental picture of an event in our minds. However, observational learning is facilitated when we are able to translate these mental pictures into verbal form. Once we have an event represented in both visual and verbal forms, it is important that we rehearse it in our minds before enacting it. The process of rehearsal increases the likelihood of learning and retaining the observed event accurately.

3. Reproduction processes: The next stage in the social learning process is to reproduce an observed event. Enacting events involves three successive steps. The first step is to remember the event and to determine which responses will be enacted. Second, the behavior is initiated based on the physical and cognitive capabilities of the individual. Third, the actions are refined based on feedback from others.

4. Motivational processes: We do not reproduce all the attitudes and behaviors we observe. One factor which plays an important role in determining whether we enact a learned behavior or attitude is motivation. Motivation refers to rewards and punishments; that is, whether or not an event is reinforced. Reinforcement can be actual (e.g., social approval, money, or privileges) or vicarious. Vicarious reinforcement occurs when we see others being rewarded.

In Harrison and Cantor's (1997) previously mentioned study, they use social learning theory to explain their findings because modeling "provides a theoretical means by which [people] may acquire a body ideal, the motivation to engage in extreme dieting behavior, and the instructions on how to do so

from the media" (p.44). They highlight two components of the social learning model which are relevant to this thesis--prevalence and incentives--to provide an explanation of how dieting behaviors and the stereotypical body type ideal may be socially learned from the mass media.

Prevalence is a relevant component because television and magazines contain an abundance of diet-related images, advertisements, and thin-bodied models and characters (Harrison & Cantor, 1997). As images of thinness and dieting dominate popular media, modeling of diet behaviors should follow (Harrison & Cantor, 1997). Incentives are also highlighted because numerous television characters are rewarded for their slim, muscular appearances (e.g., they receive attention from the opposite sex, they are popular, they appear happy and satisfied). Thus, observers may feel that they will also be rewarded by others and become personally satisfied by achieving the stereotypical body type ideal (Harrison & Cantor, 1997).

Based on social learning theory, the following hypotheses are proposed:

I. Television viewing is positively correlated with:

H3a: body dissatisfaction;

H3b: belief in the stereotypical body type ideal; and

H3c: attempts to improve one's figure through dieting and exercise behaviors.

II. Magazine readership is positively correlated with:

H4a: body dissatisfaction;

H4b: belief in the stereotypical body type ideal; and

H4c: attempts to improve one's figure through dieting and exercise behaviors.

III. For female respondents, identification with (a) female models and (b) female television stars who have the stereotypical body type ideal is positively correlated with:

H5a: body dissatisfaction;

H5b: belief in the stereotypical body type ideal; and

H5c: attempts to improve one's figure through dieting and exercise behaviors.

IV. For male respondents, identification with (a) male athletes and (b) male television stars who have the stereotypical body type ideal is positively correlated with:

H6a: body dissatisfaction;

H6b: belief in the stereotypical body type ideal; and

H6c: attempts to improve one's figure through dieting and exercise behaviors.

Thus, media exposure and identification with media characters are expected to positively influence body dissatisfaction. Scales will be constructed to measure identification with media characters and body dissatisfaction, and a survey instrument will be created that measures the hypotheses. Then, to determine the extent of the media's influence, regression analysis will be conducted to control for other known predictors of body dissatisfaction (i.e., BMI, interpersonal sources).

Chapter Three

METHODOLOGY

PRETEST

In December, 1996, a preliminary questionnaire was completed by 10th and 11th grade students (n=71) during their home room period at a public high school in Eaton Rapids, Michigan. Essay questions were asked (1) to identify the sources (both media and non-media) that influence the respondents about their bodies; (2) to determine the range of media they use; (3) to assess their level of satisfaction with their bodies; and (4) to learn the language they use when discussing these issues.

A survey instrument was created based on the results of this preliminary questionnaire. It was pretested with 9th and 10th grade students (n=83) in English and Drama classes at a public high school in Okemos, Michigan in February, 1997. Administration of the pretest enabled the researcher to determine the amount of time necessary for the respondents to complete the questionnaire, as well as to note respondents' confusion with the wording and structure of the instrument. The data were statistically processed to check the distribution of the variables as well as to conduct a scale analysis. Revisions were made to the questionnaire based on the pretest results; all items dropped from the instrument are listed in Appendix A.

SURVEY ADMINISTRATION

In February, March, and April, 1997, the survey was administered by a female master's candidate to 9th and 10th grade students (n=382) in their English, Science, or home room classes. The classes were drawn from public high schools in Bath, Okemos, Portland, and St. Johns, Michigan, as well as in Omaha, Nebraska. There were two separate questionnaires, one for boys and one for girls. Complete questionnaires are in Appendices B and C.

The principals of each of the participating high schools acted in 'loco parentis' so that parents of the students were not required to sign permission slips. Before completing the questionnaires, the students were informed that their responses would be anonymous and confidential, and that their participation in the study was not mandatory. Respondents were also instructed to read a consent form before completing the questionnaire (see Appendix D).

VARIABLES

Antecedent variables. The antecedent variables consisted of the respondents' age, sex, and race.

Independent variables. The independent variables in this study were media exposure (to television and magazines), desire to look like media celebrities, interpersonal sources' influence on body satisfaction, and body type (respondents' height and weight).

Television exposure. For television, respondents first were asked approximately how many hours per week they watched the following

types of television content: sports, soap operas, and music videos. Response categories ranged from zero to 11 or more hours per week. Second, respondents were asked to estimate the amount of television they viewed on an average school day. This question was divided into three dayparts: in the morning before school, in the afternoon before dinner, and after dinner. Response categories ranged from zero to four or more hours per day. Third, respondents were asked how many hours of television they watched on a typical Saturday and Sunday, with response categories ranging from zero to nine or more hours per day.

The students also were asked whether they watched 17 shows which aired in prime time or Saturday morning hours on six major broadcast networks, ABC, CBS, FOX, NBC, UPN, and WB. These shows were selected because they often portrayed the stereotypical body type ideal. Fourteen of the 17 shows aired weekly, thus, responses were measured on a five point scale (never=1, less than once a month=2, about once a month=3, once every 2-3 weeks=4, almost every week=5). These shows included *Beverly Hills, 90210, Boy Meets World, Clueless, ER, Friends, Hang Time, Lois & Clark, Melrose Place, Moesha, NYPD Blue, Party of Five, Relativity, Suddenly Susan,* and *The Single Guy*. The other three shows can be seen daily; frequency of viewing was measured on a five point scale with the following response categories: never (1), about once a month (2), once every 2-3 weeks (3), once a week (4), and several times a week (5). The daily shows were *Baywatch, California Dreams,* and *Saved by the Bell.*

Magazine exposure. Respondents were asked how often they read a group of magazines selected from the top 200 paid circulation magazines for the first half of 1996 (Kelly, 1996). Magazines were chosen from this list based on the following criteria: (1) portrayal of the stereotypical body type ideal; (2) emphasis of figure-enhancing products; and (3) presence of diet or exercise-related content. Female respondents were asked how frequently they read four teen fashion magazines (*Sassy, Seventeen, Teen,* and *YM*), as well as seven women's fashion magazines (*Allure, Cosmopolitan, Elle, Glamour, Mademoiselle, Marie Claire,* and *Vogue*). Frequency of reading was measured on the five point scale used for weekly TV shows, with response categories ranging from never (1) to almost every week (5). While the magazines chosen for this survey are monthly magazines, this scale was used because respondents may either read a magazine more than once or may read it across a period of several sittings.

In the pretest, male respondents were asked how frequently they read seven magazines of three types: men's fashion (*Details, Esquire,* and *GQ*), health (*Men's Health* and *Muscle and Fitness*), and sports (*Sports Illustrated* and *The Sporting News*). Because more than 99 percent of the pretest sample did not read men's fashion or health magazines, they were dropped from the questionnaire and the sports magazine category was expanded. In the final version of the questionnaire, male respondents were asked how frequently they read *Inside Sports, Runner's World, Ski, Sport, Sports Illustrated, Tennis,* and *The Sporting News.*

Desire to look like media celebrities. In the preliminary questionnaire and the pretest, respondents were asked to list celebrities whom they desired to look like. From their responses, a list of celebrities was developed who have the stereotypical body type. Female respondents were shown a list of six television actresses (Jennifer Aniston, Courteney Cox, Jennie Garth, Teri Hatcher, Jennifer Love Hewitt, and Brandy Norwood) and six fashion models (Tyra Banks, Naomi Campbell, Cindy Crawford, Kate Moss, Claudia Schiffer, and Amber Valetta). Desire to look like these people was measured on a four item, five point summated scale (strongly disagree=1, strongly agree=5).

Desire to look like Media Celebrities Scale (for models, alpha=.75, for television stars, alpha=.86, and for the combined scale--both models and television stars--alpha=.87)

1. I wish I looked like these women.
2. I admire women like these.
3. I think that these women are attractive.
4. I would like to have the body that these women have.

Male respondents were shown a list of six television actors (Dean Cain, George Clooney, Matt Le Blanc, Luke Perry, Will Smith, and Scott Wolf) and six athletes (Brett Favre, Ken Griffey, Jr., Grant Hill, Michael Jordan, Danny Weurffel, and Steve Young) who have the stereotypical body type. Desire to look like these men was measured on a five point summated scale (strongly disagree=1, strongly agree=5). For television actors, the items were:

Desire to look like Television Stars Scale (Alpha=.77)

1. I wish I looked like these men.
2. I admire men like these.
3. I would like to have the body that these men have.

An additional item, "I think these men are handsome" was dropped from the television stars scale because the pretest results demonstrated that it lowered the scale's reliability (Alpha=.69 vs. Alpha=.73). It was included in the athletes scale because it did not affect the scale's reliability in the pretest results:

Desire to look like Athletes Scale (Alpha=.78)

1. I wish I looked like these men.
2. I admire men like these.
3. I would like to have the body that these men have.
4. I think these men are handsome.

The alpha value for the combined scale (both television stars and athletes) was .83.

Interpersonal sources. The influence of interpersonal sources, such as family, peers, and friends, on body dissatisfaction, also was measured. To assess the importance of other people's opinions about the respondents' appearance, respondents were asked to rate the importance of the following people's opinions on a four point scale with response categories ranging from not applicable (0) to very important (4): mother, father, friends, classmates, brother(s), and sister(s). For the same list of people, respondents were then

asked whether the opinions they expressed about their appearance were positive (1), neutral (0), negative (-1), or not applicable (0).

Body type. Respondents' self-reported height and weight were converted by the author into a Body Mass Index (BMI) using the following calculation:

$$\frac{\text{kilograms}}{\text{meters}^2}$$

Dependent variables. The dependent variables included general body dissatisfaction, specific body dissatisfaction, desire to be thinner, belief in the stereotypical body type ideal, and diet and exercise behaviors.

General body dissatisfaction. These measures were adapted from Huddy, Nieman, and Johnson's (1993) body-image questionnaire. The original study's alpha was .72. General body dissatisfaction was measured on a five point summated scale (strongly agree=1, strongly disagree=5). General Body Dissatisfaction Scale (Alpha=.90 for the entire sample and for the female respondents only; Alpha=.88 for the male respondents only)

1. I am satisfied with the shape of my body.
2. I'm satisfied with my weight.
3. When I look into a full-length mirror, I'm satisfied with what I see.
4. I'm confident that when other people look at me, they are favorably impressed.
5. I am satisfied with the shape of my body. (Repeated)

Specific body dissatisfaction. Adapted from the body dissatisfaction subscale of Garner, Olmstead, and Polivy's (1983) Eating Disorder Inventory, these items asked respondents whether they believed that specific body parts on themselves were too small (1), just right (0), or too large (1). These items were coded so that responses of both "too small" and "too large" were considered dissatisfaction, while a response of "just right" was considered satisfaction. The original study's alpha was 0.90. In the Specific Body Dissatisfaction Scale for Females (Alpha=.70), respondents were asked about their arms, bust, thighs, stomach, waist, butt, and hips. In the Specific Body Dissatisfaction Scale for Males (Alpha=.78), respondents were asked about their arms, thighs, chest, stomach, waist, butt, and hips.

Desire to be thinner. These measures also were adapted from Huddy et al.'s (1993) body-image questionnaire. The original study's alpha was 0.72. Respondents' desire to be thinner was assessed with the following items using a five point summated scale (strongly disagree=1, strongly agree=5):

Desire to be Thinner Scale (Alpha=.92 for the entire sample, .91 for the female respondents, and .89 for the male respondents)

1. I'm too heavy.
2. I wish I could gain some weight. (Reversed)
3. I would be happier with my body if I could get rid of some of my body fat.
4. I wish I could lose some weight.
5. I diet because I wish to have a thinner body.

6. I wish I were thinner.

Because the three measures of body dissatisfaction--general body dissatisfaction, specific body dissatisfaction, and desire to be thinner--were significantly correlated with each other (see Table 1), they were converted into z scores and collapsed into one overall measure of body dissatisfaction.

Table 1: Correlations between General Body Dissatisfaction (GBD), Specific Body Dissatisfaction (SBD), and Desire to be Thinner (DT) (n=382).

	GBD	SBD	DT
GBD		0.58*	0.55*
SBD			0.50*

*p<.001

Belief in the stereotypical body type ideal. Respondents were shown the ideal body subscale (Cogan et al., 1996) for both male and female figures (see Figure 1). They were asked to identify the one ideal figure, as well as all figures they believed were too small and too large. Female respondents were also asked what they thought was the ideal clothing size for women their age (response categories ranged from 1/2 to 11/12), as well as the ideal bust (less than 30 to over 40 inches), waist (less than 19 inches to over 28 inches), and hip (less than 26 to over 36 inches) measurements for women their age.

Because the bust, hip, and waist measures were significantly correlated with each other (see Table 2), they were converted to z scores and collapsed into a single measure of belief of the stereotypical body ideal.

Diet and Exercise behaviors. Respondents were asked how often they engaged in the following activities: lifting weights, playing sports, skipping meals, dieting in order to control their weight, and engaging in cardiovascular activities like running, swimming, aerobics, or biking. These items were measured on a six point scale with the following response categories: never (1), less than once a month (2), once every month (3), once every two weeks (4), once a week (5), and several times a week (6). For the entire sample, the alpha for the diet scale was .48 and the alpha for the exercise scale was .65. For females only, the alpha for the diet scale was .50 and the alpha for the exercise scale was.68. For males only, the alpha for the diet scale was .28 and the alpha for the exercise scale was .63.

Table 2: Correlations between bust, waist, and hip measures (n=179)

	Bust	Hip	Waist
Bust		0.28*	0.23*
Hip			0.56*

*p<.01

DATA ANALYSIS

Two coders entered the data according to a codebook prepared by the author. The data were cleaned and missing values were recoded to the mean of each variable, or to the mode if rounding the mean matched the mode. The data were analyzed using SPSS 6.1 for the Macintosh.

Chapter Four

RESULTS

THE SAMPLE

The sample consisted of 382 students--203 males and 179 females--enrolled in 9th and 10th grade-level courses at public high schools. Ages ranged from 14 to 18, with a mean age of 15. Of the students, 90 percent were Caucasian, three percent were Native American/Indian, three percent were Hispanic/Latino, two percent were Asian American, two percent were African American, and one percent reported belonging to another ethnic group. For the entire sample, the mean BMI was 21.40. Girls had significantly lower BMIs ($x=20.57$) than did boys ($x=22.09$), $p<.01$, $t=4.48$.

INDEPENDENT VARIABLES

The means, standard deviations, and the possible (PR) and actual ranges for the scales and other measures used in this study are in Tables 3, 4, and 5. T-test results for the comparisons between the male and female respondents' means are in Table 6.

Television exposure. Respondents reported a mean viewing time of 23.78 hours of television per week. Boys were heavier viewers ($x=26.12$) than were girls ($x=21.12$), $p<.01$, $t=3.72$. Respondents showed little interest in watching soaps, with a mean viewing time of 0.59 hours per week. Girls were

Table 3: Means, Standard Deviations, and Ranges for the Independent and Dependent Variables--Entire Sample (n=382)1

Variable	Mean	SD	Possible Range	Actual Range
Independent Variables				
1. Total weekly TV hours	23.78	13.33	0-78	0-63
2. Soaps	0.59	1.45	0-11	0-11
3. Sports	2.93	3.19	0-11	0-11
4. Music Videos	2.72	3.14	0-11	0-11
5. 17 Shows	31.50	9.88	17-85	17-61
6. BMI	21.40	3.35	NA	14.81-36.39
7. Interpersonal Sources				
Mother	0.45	1.10	-4 to +4	-4 to +4
Father	0.39	1.27	-4 to +4	-4 to +4
Sister	0.17	1.15	-4 to +4	-4 to +4
Brother	0.06	1.20	-4 to +4	-4 to +3
Friends	0.40	0.81	-4 to +4	-3 to +3
Classmates	0.10	1.00	-4 to +4	-4 to +3
Dependent Variables				
1. General Body Dissatisfaction	14.40	4.41	5-25	5-25
2. Specific Body Dissatisfaction	2.41	2.07	0-7	0-7
3. Desire to be Thinner	17.21	6.57	6-30	6-30
4. Combined Dissatisfaction Measures	0.00	1.32	NA	-4.30 to +3.56
5. Dieting Behaviors	5.49	3.09	2-12	2-12
6. Exercise Behaviors	13.72	3.91	3-18	3-18

[1]The descriptive statistics for magazine reading, identification with media celebrities, and the ideal body type, measurements, and clothing size are listed in tables 4 and 5 because they are gender specific.

Table 4: Means, Standard Deviations, and Ranges for the Independent and Dependent Variables--Female Respondents Only (n=179)

Variable	Mean	SD	Possible Range	Actual Range
Independent Variables				
1. Total weekly TV hours	21.12	12.71	0-78	0-63
2. Soaps	1.03	1.76	0-11	0-9
3. Sports	1.73	2.34	0-11	0-11
4. Music Videos	2.61	3.07	0-11	0-11
5. 17 Shows	33.85	10.40	17-85	17-61
6. Teen magazines	9.99	3.94	4-20	4-20
7. Women's magazines	9.08	3.43	7-35	7-26
8. All magazines	19.08	6.22	11-55	11-42
9. TV Star Identification	14.26	3.11	4-20	4-20
10. Model Identification	13.67	2.94	4-20	4-20
11. Combined Identification	27.92	5.47	8-40	8-40
12. BMI	20.57	2.90	NA	15.58-33.55
13. Interpersonal Sources				
Mother	0.34	1.00	-4 to +4	-3 to +3
Father	0.43	1.23	-4 to +4	-4 to +4
Sister	0.26	1.05	-4 to +4	-3 to +4
Brother	0.01	1.31	-4 to +4	-4 to +3
Friends	0.51	0.77	-4 to +4	-3 to +3
Classmates	0.10	1.00	-4 to +4	-3 to +3
Dependent Variables				
1. General Body Dissatisfaction	15.51	4.41	5-25	5-25
2. Specific Body Dissatisfaction	3.24	1.99	0-7	0-7
3. Desire to be Thinner	20.05	6.26	6-30	6-30
4. Combined Dissatisfaction Measures	0.57	1.18	NA	-2.57 to +3.56
5. Dieting Behaviors	6.66	3.26	2-12	2-12
6. Exercise Behaviors	13.16	3.97	3-18	3-18
7. Ideal Body Type	4.75	0.95	1-12	2-7
8. Ideal Clothing Size	6.05	1.78	1-11	1-11
9. Ideal Bust Measurement	35.02	1.96	30-40	30-40
10. Ideal Hip Measurement	30.58	2.61	26-36	26-36
11. Ideal Waist Measurement	24.13	2.28	19-28	19-28
12. All Measurements	-0.00	3.05	NA	-8.56 to +8.45

Table 5: Means, Standard Deviations, and Ranges for the Independent and Dependent Variables--Male Respondents Only (n=203)

Variable	Mean	SD	Possible Range	Actual Range
Independent Variables				
1. Total weekly TV hours	26.12	13.26	0-78	1-63
2. Soaps	0.19	0.94	0-11	0-11
3. Sports	3.99	3.47	0-11	0-11
4. Music Videos	2.82	3.22	0-11	0-11
5. 17 Shows	29.43	8.93	17-85	17-56
6. Sports magazines	9.13	4.35	5-25	5-23
7. TV Star Identification	8.52	2.48	3-15	3-15
8. Athlete Identification	12.26	2.48	4-20	4-20
9. Combined Identification	20.78	5.22	7-35	7-35
10. BMI	22.09	3.55	NA	14.81-36.39
11. Interpersonal Sources				
Mother	0.54	1.17	--4 to +4	-4 to +4
Father	0.36	1.31	-4 to +4	-4 to +4
Sister	0.08	1.22	-4 to +4	-4 to +4
Brother	0.11	1.09	-4 to +4	-4 to +3
Friends	0.31	0.83	-4 to +4	-3 to +3
Classmates	0.10	1.00	-4 to +4	-4 to +3
Dependent Variables				
1. General Body Dissatisfaction	13.29	4.41	5-25	5-25
2. Specific Body Dissatisfaction	1.67	1.84	0-7	0-7
3. Desire to be Thinner	14.72	5.79	6-30	6-29
4. Combined Dissatisfaction Measures	-0.50	1.23	NA	-4.30 to +2.97
4. Dieting Behaviors	4.45	2.53	2-12	2-12
5. Exercise Behaviors	14.21	3.79	3-18	3-18
6. Ideal Body Type	5.83	1.48	1-12	2-12

Table 6: T-tests for Male-Female Comparisons[1]

Variable	df	t value	p value
Total weekly TV hrs	380	3.72	.00
17 shows	380	-4.47	.00
Soaps	380	-5.92	.00
Sports	380	7.34	.00
Music Videos	380	0.63	.53
General Dissatisfaction	380	-5.07	.00
Desire to be Thinner	380	-8.85	.00
Exercise	380	2.66	.01
Diet	380	-7.41	.00
BMI	380	4.48	.00
Mother	380	1.82	.07
Father	380	-0.59	.55
Sister	380	-1.53	.13
Brother	380	0.84	.40
Friends	380	-2.43	.02
Classmates	380	0.08	.93

[1]T-tests were conducted on all variables for which male-female comparisons could be made. Certain variables (e.g., celebrity identification and ideal body type) could not be compared because they were measured differently.

more frequent viewers (x=1.03) than were boys (x=0.19), $p<.01$, $t=-5.92$. Boys watched more hours of sports per week (x=3.99) than did girls (x=1.73), $p<.01$, $t=7.34$, while boys (x=2.82) and girls (x=2.61) spent a similar number of hours per week watching music videos, $p>.05$, $t=0.63$.

Respondents were not heavy viewers of the 17 shows selected for frequently portraying the stereotypical body type ideal (x=31.50, PR=17-85). Girls reported watching these shows more often (x=33.85) than did boys (x=29.43), $p<.01$, $t=-4.47$.

Magazine readership. Respondents were not frequent magazine readers. Girls reported spending a moderate amount of time reading teen fashion magazines (x=9.99, PR=4-20) and a lesser amount reading women's fashion magazines (x=9.08, PR=7-35). Because more than 80 percent of the boys did not read two of the magazines (*Runner's World* and *Tennis*), they were dropped from the analysis. Boys did not report spending significant time reading the remaining sports magazines (x=9.13, PR=5-25).

Desire to look like media celebrities. Girls expressed a desire to look like female television stars (x=14.26, PR=4-20) and models (x=13.67, PR=4-20), and scored above the midpoint for both scales combined (x=27.92, PR=8-40). Boys were somewhat interested in looking like athletes (x=12.26, PR=4-20). However, they scored below the midpoint on the desire to look like male television stars scale (x=8.52, PR=3-15), as well as on both scales combined (x=20.78, PR=7-35).

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Interpersonal sources. The impact of interpersonal sources' opinions on respondents' body dissatisfaction was determined by multiplying the importance of people's opinions by the polarity of these opinions. For example, if a friend's opinion is very important (4) to the respondent and the opinion expressed is negative (-1), this would be calculated as 4 x -1 for a score of -4.

Respondents did not give much weight to the evaluations of their families, friends, and peers. Each of these people's opinions--mothers' (x=0.45, PR=-4 to +4), fathers' (x=0.39, PR=-4 to +4), sisters' (x=0.17, PR=-4 to +4), brothers' (x=0.06, PR=-4 to +4), friends' (x=0.40, PR=-4 to +4), and classmates' (x=0.10, PR=-4 to +4)--was close to the neutral point of the scale. Friends' opinions were more important to girls, while the other interpersonal sources' opinions were of equal importance to boys and girls.

DEPENDENT VARIABLES

Body dissatisfaction. Respondents fell in the middle of the scale for general body dissatisfaction (x=14.40, PR=5-25). Girls expressed significantly more body dissatisfaction (x=15.51) when compared to boys (x=13.29), $p<.01$, t=-5.07. Respondents scored below the midpoint of the scale for specific body dissatisfaction (x=2.41, PR=0-7). Girls expressed a moderate level (x=3.24) of specific body dissatisfaction, while boys fell on the lower end of the scale (x=1.67).

Desire to be thinner. Respondents also fell close to the midpoint on the desire to be thinner scale (x=17.21, PR=6-30). Girls were significantly more

interested in becoming thinner (x=20.05) than were boys (x=14.72), $p<.01$, $t=-8.85$.

The three dissatisfaction scales (general body dissatisfaction, specific body dissatisfaction, and desire to be thinner), were collapsed into a single z-score measure. For the entire sample, the mean score was zero. For girls only, the mean score was 0.57. For boys only, the mean score was -0.50.

Belief in the stereotypical body type ideal. Girls tended to prefer smaller female figures on the ideal body subscale (see Figure 1): Their mean score for the ideal body type was 4.75 (PR=1-12). Their choice of the ideal body type also fell within a narrow range; those figures slightly above the midpoint of the scale were believed to be too large (x=7.87), while the first three figures on the scale were considered to be too small (x=2.98). The male figure they idealized fell close to the midpoint of the scale (x=5.14). Girls' choice of the ideal clothing size fell close to the midpoint of the scale (x=6.05, PR=1-11), as did their choices for the ideal bust (x=35.02, PR=30-40), hips (x=30.58, PR=26-36), and waist (x=24.13, PR=19-28) measurements.

Boys preferred male figures close to the midpoint of the ideal body subscale (x=5.83, PR=1-12), while they believed that those figures toward the high end of the scale were too large (x=9.14) and that the first three figures were too small (x=2.76). Their choice of the ideal female figure also fell close to the midpoint of the scale (x=5.24).

Diet and exercise behaviors. Respondents reported frequently engaging in exercise behaviors (x=13.72, PR=3-18). Boys exercised more often (x=14.21)

than did girls (x=13.16), p<.05, $\underline{t}$=2.66. Respondents fell below the midpoint of the scale for dieting behaviors (x=5.49, PR=2-12). Girls (x=6.66) engaged in dieting behaviors more frequently than did boys (x=4.45), p<.01, $\underline{t}$=-7.41.

CORRELATIONAL ANALYSES

Correlational analyses enable us to determine the strength of the linear association between two variables. Thus, it is important to evaluate whether the independent and dependent variables form linear relationships before correlational analyses are conducted. The slopes, y-intercepts, bivariate scatterplots of the independent variables with the dependent variables, and histograms of the graphed error terms were examined in order to determine that the data are consistent with the definition of a linear function (Boster, 1996).

The independent variable of television exposure (hours of television viewed per week) is skewed in the positive direction (skew of 0.66) because the respondents tended to be light to moderate television viewers. The other television viewing independent variables are also skewed in the positive direction due to the lack of heavy viewership: soaps (skew of 3.49), sports (skew of 1.25), videos (skew of 1.35), and the 17 shows (skew of 0.60). Thus, linear relationships were more difficult to define because of restriction of range. However, further inspection of the y-intercepts, slopes, bivariate plots, and the histograms of the graphed error terms demonstrate that the relationships appear to be linear and provide rationale for engaging in correlational analysis.

The independent variable of magazine readership is also positively skewed for both girls (skew of 1.30) and boys (skew of 1.02). The independent variable of media character identification is negatively skewed for girls (-0.46) as well as for boys (skew of -0.40). The interpersonal source independent variables are normally distributed for mother and sister, negatively skewed for father (skew of -0.25), brother (skew of -0.83), and classmates (skew of -0.31), and positively skewed for friends (skew of 0.38). Finally, the independent variable of body type (BMI) is skewed in the positive direction (skew of 1.40). As was the case with the television exposure independent variables, further inspection of the y-intercepts, slopes, bivariate plots, and the histograms of the graphed error terms for these independent variables suggest that correlational analysis may be conducted. Pearson's Product Moment Correlation Coefficients (r) were used for the following analyses.

Tests of Hypotheses

Originally, hypotheses 1 through 4 did not include separate predictions by gender. However, when possible, the results are reported for the hypotheses by the entire sample, girls only, and boys only, in order to provide more depth to the analysis.

Body type findings. Hypothesis 1 predicted that BMI was positively correlated with body dissatisfaction. This relationship was significant for the entire sample ($r=0.25$, $p<.01$), as well as for girls only ($r=.46$, $p<.01$), and boys only ($r=0.33$, $p<.01$).

Interpersonal sources findings. Hypothesis 2 predicted that positive evaluations by interpersonal sources important to the respondent negatively correlate with the respondent's degree of body dissatisfaction (see Tables 7, 8, and 9). For the entire sample, this hypothesis was not supported. For girls, this relationship was significant for friends ($r=-0.18$, $p<.05$). No significant relationships emerged for boys.

Media exposure findings. Hypothesis 3a predicted that television viewing was positively correlated with body dissatisfaction (see Tables 10, 11, and 12). For the entire sample, this hypothesis was supported for the 17 shows ($r=0.15$, $p<.01$) and soaps ($r=0.12$, $p<.05$). The relationship between viewing sports and dissatisfaction was also significant, but in the opposite direction than had been predicted ($r=-0.17$, $p<.01$). For girls only, this relationship was significant for videos ($r=0.16$, $p<.05$). No significant relationships were found for boys only.

Hypothesis 3b predicted that television exposure was positively correlated with the belief in the stereotypical body type ideal (see Tables 13 and 14). For girls only, the total number of hours of television watched per week was significantly correlated with the ideal body type ($r=-0.16$, $p<.05$). Watching soaps was significantly correlated with the ideal clothing size ($r=-0.17$, $p<.01$), while the total weekly hours watched ($r=-0.25$, $p<.01$), viewing the 17 shows ($r=-0.20$, $p<.01$) and soaps ($r=-0.19$, $p<.01$) were significantly correlated with the ideal body measurements. The findings for ideal body type and measurements were consistent with the hypothesis because the

Table 7: Correlations between Interpersonal Sources and Body Dissatisfaction (BD), and Diet and Exercise Behaviors (n=382)

IP Sources	Body Dissatisfaction	Diet	Exercise
Mother	-0.07	-0.13*	0.09
Father	-0.04	-0.08	0.13*
Sister	0.03	0.03	-0.03
Brother	-0.01	-0.07	0.05
Friends	-0.00	-0.03	0.05
Peers	0.02	-0.06	0.12*

Table 8: Correlations between Interpersonal Sources and Body Dissatisfaction (BD), Diet and Exercise (EB) Behaviors, and Ideal Body Type, Measurements, and Clothing Size--Female Respondents Only (n=179)

IP Sources	BD	Diet	EB	Ideal	Measure	Size
Mother	-0.07	-0.18*	0.03	-0.05	0.00	-0.01
Father	-0.00	-0.14	0.13	-0.06	0.06	-0.05
Sister	-0.02	-0.05	-0.08	-0.08	0.15	0.09
Brother	0.02	-0.08	0.04	-0.02	0.16*	-0.04
Friends	-0.18*	-0.16*	-0.06	-0.01	0.03	-0.01
Peers	0.05	-0.05	0.15*	-0.16*	0.09	-0.07

Table 9: Correlations between Interpersonal Sources and Body Dissatisfaction (BD), Diet and Exercise (EB) Behaviors, and Ideal Body Type--Male Respondents Only (n=203)

IP Sources	BD	Diet	EB	Ideal
Mother	-0.01	-0.04	0.12	0.04
Father	-0.10	-0.06	0.13*	-0.00
Sister	0.02	0.06	0.03	0.05
Brother	0.01	-0.02	0.04	0.10
Friends	0.03	0.00	0.17*	-0.00
Peers	-0.00	-0.06	0.08	-0.04

*p <.05
**p <.01

Table 10: Correlations between television viewing and body dissatisfaction (n=382)

	Total hrs	17 shows	Soaps	Sports	Videos
Body Dissatisfaction	-0.06	0.15**	0.12*	-0.17**	0.05

Table 11: Correlations between television viewing and body dissatisfaction--Female Respondents Only (n=179)

	Total hrs	17 shows	Soaps	Sports	Videos
Body Dissatisfaction	-0.01	0.11	0.02	-0.07	0.16*

Table 12: Correlations between television viewing and body dissatisfaction--Male Respondents Only (n=203)

	Total hrs	17 shows	Soaps	Sports	Videos
Body Dissatisfaction	0.05	0.01	-0.03	0.00	-0.02

Table 13: Correlations between television viewing and ideal body type, measurements, and clothing size--Female Respondents Only (n=179)

	Total hrs	17 shows	Soaps	Sports	Videos
Ideal Body Type	-0.16*	-0.05	-0.07	-0.13	-0.10
Body Measurements	-0.25**	-0.20**	-0.19**	-0.09	-0.07
Clothing Size	0.04	-0.05	-0.17*	-0.00	-0.02

Table 14: Correlations between television viewing and ideal body type--Male Respondents Only (n=203)

	Total hrs	17 shows	Soaps	Sports	Videos
Ideal Body Type	0.03	0.05	-0.03	0.04	-0.14*

*p <.05
**p <.01

more television girls viewed, the smaller they believed they should be. For boys, video viewing was significantly correlated with the ideal body type ($r=-0.14$, $p<.05$).

Hypothesis 3c predicted that television viewing was positively correlated with attempts to improve one's figure through dieting and exercise behaviors (see Tables 15, 16, and 17). For the entire sample, the 17 shows ($r=0.13$, $p<.05$). videos ($r=0.19$, $p<.01$), and soaps ($r=0.22$, $p<.01$) were significantly correlated with dieting. Sports also formed a significant relationship with dieting ($r=-0.15$, $p<.01$) but not in the predicted direction. The viewing of soaps ($r=-0.12$, $p<.05$) and sports ($r=0.31$, $p<.01$) was significantly correlated with exercising. For girls only, watching videos ($r=0.31$, $p<.01$) and soaps ($r=0.23$, $p<.01$) was significantly correlated with dieting, while viewing sports was significantly correlated with exercising ($r=0.15$, $p<.05$). For boys only, viewing the 17 shows ($r=0.15$, $p<.05$) and sports ($r=0.37$, $p<.01$) was significantly correlated with exercising, while the correlations with diet failed to reach significance.

Hypothesis 4a predicted that magazine readership was positively correlated with body dissatisfaction (see Tables 18 and 19). For girls, this relationship was significant for teen magazines ($r=0.23$, $p<.01$), women's magazines ($r=0.21$, $p<.01$), and for both sets of magazines combined ($r=0.26$, $p<.01$). This relationship was not significant for boys.

Hypothesis 4b predicted that magazine readership was positively

Table 15: Correlations between television viewing and diet and exercise (n=382)

	Total hrs	17 shows	Soaps	Sports	Videos
Diet	-0.08	0.13**	0.22**	-0.15**	0.19**
Exercise	-0.05	0.09	-0.12*	0.31**	-0.00

Table 16: Correlations between television viewing and diet and exercise--Female Respondents Only (n=179)

	Total hrs	17 shows	Soaps	Sports	Videos
Diet	0.02	0.09	0.23**	0.06	0.31**
Exercise	-0.05	0.10	-0.06	0.15*	0.00

Table 17: Correlations between television viewing and diet and exercise--Male Respondents Only (n=203)

	Total hrs	17 shows	Soaps	Sports	Videos
Diet	-0.04	0.02	-0.07	-0.10	0.13
Exercise	-0.10	0.15*	-0.13	0.37**	-0.02

Table 18: Correlations between magazine reading and body dissatisfaction--Female Respondents Only (n=179)

	Teen Magazines	Women's Magazines	Both Magazines
Body Dissatisfaction	0.23**	0.21**	0.26**

Table 19: Correlations between magazine reading and body dissatisfaction--Male Respondents Only (n=203)

	Sports Magazines
Body Dissatisfaction	-0.11

*p <.05
**p <.01

correlated with the belief in the stereotypical body type ideal (see Table 20). For boys, this relationship was significant ($r=0.14$, $p<.05$). No significant relationships were found for girls.

Hypothesis 4c predicted that magazine readership was positively correlated with attempts to improve one's figure through diet and exercise (see Tables 21 and 22). For girls only, magazine readership was significantly correlated with diet ($r=0.30$, $p<.01$), while the relationship with exercise did not reach significance. For boys only, magazine readership was positively correlated with exercise ($r=0.37$, $p<.01$), while the relationship with diet was not significant.

Hypothesis 5a predicted that female respondents' identification with female models and television stars was positively correlated with body dissatisfaction (see Table 23). This relationship was significant for models ($r=0.37$, $p<.01$), television stars ($r=0.36$, $p<.01$), and for both scales combined ($r=0.40$, $p<.01$).

Hypothesis 5b predicted that female respondents' identification with female models and television stars was positively correlated with the belief in the stereotypical body type ideal (see Table 24). Identification with models ($r=-0.19$, $p<.05$) and both scales combined ($r=-0.16$, $p<.05$) were significantly correlated with the ideal body type. Identification with models was significantly correlated with ideal body measurements ($r=-0.18$, $p<.05$), while identification with television stars ($r=-0.20$, $p<.01$), models ($r=-0.20$, $p<.01$), and both scales combined ($r=-0.22$, $p<.01$) were significantly correlated with

Table 20: Correlations between magazine reading and ideal body type, measurements, and clothing size--Female Respondents Only (n=179)

	Teen Magazines	Women's Magazines	Both Magazines
Ideal Body	0.09	-0.00	0.06
Measurements	-0.06	0.04	-0.01
Clothing Size	-0.02	-0.03	-0.03

Table 21: Correlations between magazine reading and diet and exercise--Female Respondents Only (n=179)

	Teen Magazines	Women's Magazines	Both Magazines
Diet	0.30*	0.20*	0.30*
Exercise	0.13	0.06	0.10

Table 22: Correlations between magazine reading and diet and exercise--Male Respondents Only (n=203)

	Sports Magazines
Diet	0.01
Exercise	0.37*

Table 23: Correlations between identification with models, television stars (TS), and body dissatisfaction--Female Respondents Only (n=179)

	Models	TS	Both Scales
Body Dissatisfaction	0.37*	0.36*	0.40*

*p <.01

the ideal clothing size.

Hypothesis 5c predicted that female respondents' identification with female models and television stars was positively correlated with attempts to improve one's figure through diet and exercise (see Table 25). Identification with models ($r=0.17$, $p<.05$) and both scales combined ($r=0.16$, $p<.05$) were significantly correlated with diet. Identification with models ($r=0.21$, $p<.01$) and both scales combined ($r=0.19$, $p<.05$) also were significantly correlated with exercise.

Hypothesis 6a predicted that male respondents' identification with male athletes and television stars was positively correlated with body dissatisfaction (see Table 26). This relationship was significant for athletes ($r=0.21$, $p<.01$), television stars ($r=0.22$, $p<.01$), and for both scales combined ($r=0.24$, $p<.01$).

Hypothesis 6b predicted that male respondents' identification with male athletes and television stars was positively correlated with the belief in the stereotypical body type ideal (see Table 27). This relationship was not significant.

Hypothesis 6c predicted that male respondents' identification with male athletes and television stars was positively correlated with the attempts to improve one's figure through diet and exercise (see Table 28). The relationship between identification with athletes and exercise reached significance ($r=0.16$, $p<.05$), while diet was not significantly correlated with the identification measures. A summary of the hypotheses tests is in Table 29.

Table 24: Correlations between identification with models, television stars (TS), and the ideal body type, measurements, and clothing size--Female Respondents Only (n=179)

	Models	TS	Both Scales
Ideal Body	-0.19**	-0.11	-0.16*
Measurements	-0.18*	-0.06	-0.12
Clothing Size	-0.20**	-0.20**	-0.22**

Table 25: Correlations between identification with models, television stars (TS), and diet and exercise--Female Respondents Only (n=179)

	Models	TS	Both Scales
Diet	0.17*	0.12	0.16*
Exercise	0.21**	0.13	0.19*

Table 26: Correlations between identification with athletes, television stars (TS), and body dissatisfaction--Male Respondents Only (n=203)

	Athletes	TS	Both Scales
Body Dissatisfaction	0.21**	0.22**	0.24**

Table 27: Correlations between identification with athletes, television stars (TS), and the ideal body type--Male Respondents Only (n=203)

	Athletes	TS	Both Scales
Ideal Body	0.01	-0.04	-0.01

Table 28: Correlations between identification with athletes, television stars (TS), and diet and exercise--Male Respondents Only (n=203)

	Athletes	TS	Both Scales
Diet	0.02	-0.05	-0.01
Exercise	0.16*	-0.01	0.10

*p<.05
**p<.01

Table 29: Summary of Hypotheses Tests

Hypothesis	Outcome
Hypothesis 1 (BMI and body dissatisfaction)	Supported for the entire sample, girls only, and boys only.
Hypothesis 2 (Interpersonal sources and body dissatisfaction)	Supported only for friends' influence on girls.
Hypothesis 3a (Television viewing and body dissatisfaction)	For the entire sample, supported for the 17 shows and soaps. A significant relationship was also found for sports, but in the opposite direction than had been predicted. For females only, supported for music videos.
Hypothesis 3b (Television viewing and ideal body type, measurements, and clothing size)	For girls only, supported for the ideal body type, clothing size, and measurements. For boys only, supported for the ideal body type.
Hypothesis 3c (Television viewing and diet and exercise)	For the entire sample, supported for the correlation between the 17 shows, music videos, soaps and diet. A significant relationship also was found for sports, but in the opposite direction than had been predicted. The viewing of soaps and sports was significantly correlated with exercise. For girls only, watching music videos and soaps was significantly correlated with dieting, and viewing sports was significantly correlated with exercise. For boys only, viewing the 17 shows and sports was significantly correlated with exercise.
Hypothesis 4a (Magazine readership and body dissatisfaction)	Supported for girls only.
Hypothesis 4b (Magazine readership and the ideal body type)	Supported for boys only.

Table 29 (cont'd).

Hypothesis 4c (Magazine readership and diet and exercise)	For girls only, magazine readership was significantly correlated with diet. For boys only, magazine readership was significantly correlated with exercise.
Hypothesis 5a (Females' identification with media celebrities and body dissatisfaction)	Supported
Hypothesis 5b (Females' identification with media celebrities and the ideal body type, measurements, and clothing size)	Supported
Hypothesis 5c (Females' identification with media celebrities and diet and exercise)	Supported
Hypothesis 6a (Males' identification with media celebrities and body dissatisfaction)	Supported
Hypothesis 6b (Males' identification with media celebrities and ideal body type	Not Supported
Hypothesis 6c (Males' identification with media celebrities and diet and exercise)	Supported for exercise only.

MULTIPLE REGRESSION ANALYSES

Engaging in multiple regression analysis allows us to further evaluate the relationships between the independent variables. Are they stronger predictors of the dependent variables when combined? Do they suppress or complement each other? Multiple regression coefficients (R) allow us to assess the spread of the predictors around the regression plane (Boster, 1996). Standardized regression coefficients (β) enable us to determine the impact of the independent variables on the dependent variables while controlling for the effects of the other predictors (Boster, 1996). Multiple regression coefficients and standardized regression coefficients are in Tables 30 and 31.

Preliminary multiple regression analyses were conducted matching all of the independent variables with each dependent variable. Because the independent variables which were not significantly correlated with the dependent variables also were not significant predictors in the regression equations, they were eliminated from the analyses. The second run of multiple regression analyses included only those variables which had correlated significantly with the dependent variables. The presence of outliers was assessed through the analysis of bivariate scatterplots and Mahalanobis and Cook's Distance parameters. Four outliers were found among the male sample; however, they were not dropped from the following analyses because the deletion of them did not significantly affect the results.

Table 30: Regression Analyses of Body Dissatisfaction, Ideal Body Type, and Diet and Exercise Measures--Female Respondents Only (n=179)

Variable	Predictors	Beta	p value	Outcome
Body Dissatisfaction	Magazines	.03	.66	R=.38
	Celebrity			R square=.13
	Identification	.16	.03	F=7.42, p<.01
	Friends	-.12	.09	
	BMI	.29	.00	
Diet	Music Videos	.19	.02	R=.48
	Soaps	.16	.03	R square=.20
	Magazines	.12	.15	F=6.39, P<.01
	Celebrity			
	Identification	.08	.30	
	Mother	-.12	.14	
	Father	-.07	.41	
	BMI	.23	.00	
Exercise	Sports	.12	.11	R=.29
	Magazines	.09	.25	R square=.06
	Celebrity			F=3.88, p<.01
	Identification	.16	.03	
	Classmates	.12	.10	
Ideal Body Type	Total weekly			
	TV hours	-.14	.06	R=.26
	Celebrity			R square=.05
	Identification	-.14	.06	F=4.29, p<.01
	Classmates	-.15	.05	
Ideal Clothing Size	Soaps	-.10	.17	R=.37
	Celebrity ID	-.14	.06	R square=.12
	BMI	.26	.00	F=9.32, p<.01
Ideal Body Measurements	17 Shows	-.06	.46	R=.35
	Total weekly			R square=.10
	TV hours	-.18	.03	F=4.57, p<.01
	Soaps	-.11	.15	
	Model ID	-.11	.15	
	Brother	.13	.08	

Table 31: Regression Analyses of Body Dissatisfaction, Ideal Body Type, and Diet and Exercise Measures--Male Respondents Only (n=203)

Variable	Predictors	Beta	p value	Outcome
Body Dissatisfaction	Celebrity Identification	.08	.19	R=.37 R square=.13
	BMI	.34	.00	F=15.80, p<.01
Exercise	17 Shows	.06	.28	R=.47
	Magazines	.20	.00	R square=.22
	Sports	.25	.00	F=9.17, p<.01
	Celebrity Identification	.06	.33	
	Father	.04	.57	
	Friends	.15	.03	
Ideal Body Type	Music Videos	-.15	.03	R=.30
	Magazines	.15	.03	R square=.08
	BMI	.21	.00	F=6.55, p<.01

For girls, multiple regression analyses showed identification with media characters (β=0.16, $p<.05$) and BMI (β=0.29, $p<.01$) to significantly predict body dissatisfaction (R=0.38, $p<.01$). In contrast to their correlation values, the strength of both these predictors decreased in the regression equation. However, the BMI variable complemented identification with media characters: the two variables together predicted body dissatisfaction better than identification with media characters did alone.

In the other regression equations, the predictors which had independently correlated with the dependent variables also complemented each other in the regression equations. Watching videos (β=0.19, $p<.05$), BMI (β=0.23, $p<.01$) and watching soaps (β=0.16, $p<.05$) significantly predicted dieting (R=0.48, $p<.01$), while identification with media characters (β=0.16, $p<.05$) significantly predicted exercise (R=0.29, $p<.01$). Classmates' opinions about the respondents' appearance (β=-0.15, $p<.05$) predicted the ideal body type (R=0.26, $p<.05$). Total hours of weekly television viewing (β=-0.18, $p<.05$) predicted the ideal body measurements (R=0.35, $p<01$), while BMI (β=0.26, $p<.01$) predicted the ideal clothing size (R=0.37, $p<.01$).

For boys, multiple regression analyses showed BMI to significantly predict body dissatisfaction (β=0.34, $p<.01$) (R=0.37, $p<.01$). The results demonstrate that the BMI variable is neither suppressed nor complemented by adding identification with media characters into the regression; the two

together predict dissatisfaction no better than the correlation of BMI with dissatisfaction.

Magazine readership (β=0.20, $p<.01$), viewing sports on television (β=0.25, $p<.01$) and friends' opinions regarding the respondents' appearance (β=0.15, $p<.01$) significantly predicted exercise (R=0.45, $p<.01$). The three variables together predicted frequency of exercise better than any of them did alone. However, in the regression equation, the effects of both magazine readership and sports viewing become smaller as compared to their independent correlation coefficient values. The variables of magazine readership (β=0.15, $p<.05$), watching music videos (β=-0.15, $p<.05$) and BMI (β=0.21, $p<.01$) also had a complementary effect on each other when predicting the ideal body type (R=0.30, $p<.01$). However, the standardized regression coefficients are similar to the simple correlation values.

Chapter Five

DISCUSSION

The purpose of this study was to measure the effect of media exposure on adolescent body dissatisfaction. In popular television programs and magazines, physical attractiveness tends to be equated with having a slim, physically fit figure, and this "ideal" figure is often displayed. Thus, it was proposed that frequent television viewers and magazine readers would be more likely to (1) express dissatisfaction with their bodies, (2) admire body types similar to the ones idealized by the media, and (3) attempt to improve their bodies through diet and exercise. These propositions were grounded in the principles of social learning theory, which suggests that people learn behaviors and attitudes by viewing models who are positively reinforced for their actions. A second goal of this study was to analyze media influence on adolescents' evaluations of their bodies when controlling for other significant predictors of body dissatisfaction.

Was the social learning model an appropriate theoretical framework for this study? The hypotheses based on this theory were for the most part supported: More frequent television viewers and magazine readers expressed greater dissatisfaction with their bodies, idealized body types like those found in popular media, and modeled figure-enhancing behaviors (diet and exercise). However, to more adequately assess social learning as an

appropriate model for this analysis, one of the primary components of this theory, motivation, should have been measured more comprehensively. This study focused primarily on possible outcomes of exposure to the thin ideal, such as respondents' dissatisfaction with their bodies and the behaviors they engaged in to improve them, without linking these outcomes to a source. In order to better determine whether teens were motivated by the media characters they viewed (instead of being motivated by other factors), a portion of the questionnaire should have addressed whether they believed these models were rewarded for their appearance (e.g., agreement/disagreement statements such as "Girls with thin bodies are more popular," "Boys with muscular figures get more dates"). Such an analysis would have better defined the media's role as a motivator. With this limitation in mind, the results are discussed in the following section.

INTERPRETATION OF RESULTS

With a mean BMI of 21, the respondents in this study were at the lower end of the normal weight range. Garrow and Webster (1985) indicate that normal BMIs range between 20-25 for both sexes. Despite this, they reported dissatisfaction with their weight and body type and the girls especially expressed a desire to become thinner.

The respondents also spent a significant amount of time watching television--the equivalent of nearly one full day per week. This result, combined with their moderate level of magazine reading, demonstrates that they are exposed to a steady diet of media which emphasize attractive, slender

people. Thus, it is difficult to believe that such prevalent images would not influence young people's perceptions of their appearance.

The results indicate that the types of television viewed, and not just the sheer amount, mattered when predicting body dissatisfaction (Hypothesis 3a). Interestingly, the total television hours viewed per week did not have a significant effect on body dissatisfaction. However, heavier viewers of the 17 shows or soaps were more dissatisfied with their bodies, while sports viewers expressed less dissatisfaction. Music video viewing also increased girls' body dissatisfaction.

The one area where sheer television exposure formed a significant relationship was in girls' choice of the ideal body type and measurements (Hypothesis 3b). The more weekly hours of television girls viewed, the more they preferred thinner bodies and smaller body measurements. Boys, however, were influenced in their choice of the ideal body type by music videos--the more they watched, the thinner the bodies they chose--perhaps because videos do not focus solely on athletic male figures.

Watching certain types of television also influenced respondents' attempts to improve their figures (Hypothesis 3c). Viewing the 17 shows, soaps, and/or music videos increased dieting behaviors, while viewing sports decreased them. Not surprisingly, those respondents who watched sports exercised more frequently. However, soap viewing had a negative effect on exercise.

Magazine readership also led to body dissatisfaction for girls (Hypothesis 4a), while for boys, frequent magazine readers chose larger body types as ideal (Hypothesis 4b). This relationship may be explained by the fact that boys were asked only about sports magazines, which emphasize muscular, athletic figures. Female magazine readers were also more likely to diet, while male magazine readers were more likely to exercise (Hypothesis 4c). The results for the girls support the findings of magazine content analyses (e.g., Nemeroff, Stein, Diehl, & Smilack, 1994; Snow & Harris, 1986) which have consistently found heavy emphasis on dieting.

Desiring to look like media celebrities also had a significant influence on body dissatisfaction. For girls, identification with models led to body dissatisfaction (Hypothesis 5a), the idealization of smaller body types, measurements, and clothing sizes (Hypothesis 5b), and an increase in diet and exercise behaviors (Hypothesis 5c). Identification with television stars also led to body dissatisfaction, the idealization of smaller clothing sizes, and more frequent exercising. Boys were less influenced by media celebrities, yet those who identified with them expressed more body dissatisfaction (Hypothesis 6a) and spent more time exercising (Hypothesis 6c).

Because teens are surrounded by other influences besides the media, it is important to consider the impact of other variables on body dissatisfaction. Personal body type characteristics influenced respondents' body dissatisfaction; larger respondents were significantly more dissatisfied with their bodies than were smaller respondents (Hypothesis 1). However, the

influence of other people's opinions regarding the respondents' appearances did not prove to be as important as predicted. Friends emerged as the only significant source of influence: Their positive opinions lessened girls' body dissatisfaction (Hypothesis 2). Boys did not appear to be swayed by the opinions of those around them. Given the relatively weak relationship between interpersonal sources and body dissatisfaction, this variable may need to be examined from another angle. Perhaps respondents are impacted by other people's general comments about appearance; for example, teenage girls may be influenced by their friends' constant discussions about losing weight.

The multiple regression analyses enabled us to further examine the relationships between these predictors. For boys, none of the media variables emerged as significant predictors of body dissatisfaction. Identification with media characters had no effect when controlling for BMI. In contrast, identification with media characters increased girls' body dissatisfaction even when controlling for the effects of BMI and magazine reading. However, BMI emerged as the stronger predictor in the regression equation.

Not surprisingly, boys who read sports magazines and watched sports on television exercised frequently. These predictors, along with friends' opinions about their appearance, were significant in the regression equation. However, only identification with media characters emerged as a significant influence on girls' exercising habits: The greater their desire to look like them, the more they exercised. Media variables were significant in boys' and

girls' choices of ideal body types. Reading magazines led boys to choose larger body types as ideal, while watching music videos caused them to choose smaller bodies as ideal, even when controlling for BMI. The total weekly hours of television viewed had no effect on girls' choice of the ideal body type when controlling for classmates' opinions. However, media influences were significant factors in girls' choice of the ideal body measurements and clothing size. Total weekly hours of television viewing led girls to idealize smaller body measurements, even when controlling for the 17 shows, soaps, identification with models, and the opinions of classmates.

STUDY LIMITATIONS

This study provided an exploratory analysis of the media's relationship with other predictor variables in influencing adolescent body dissatisfaction. It was limited by several factors which would be useful to consider in subsequent studies. First, the lack of ethnic diversity among the sample prevented racial comparisons from being conducted. Such comparisons would have been useful because ethnicity has been established as a significant predictor of body dissatisfaction. Second, the sample consisted solely of adolescents from a western culture. Because it has been demonstrated that people from non-western cultures are more satisfied with their bodies, it would be illuminating for future studies to conduct a cross-cultural analysis.

Third, the media variables in this study were affected by restriction in range. Respondents were neither frequent magazine readers nor heavy viewers of the 17 shows, soaps, and music videos, which caused attenuation

of the correlation coefficients. Stronger correlations between media exposure and body dissatisfaction might have emerged if these variables had been normally distributed.

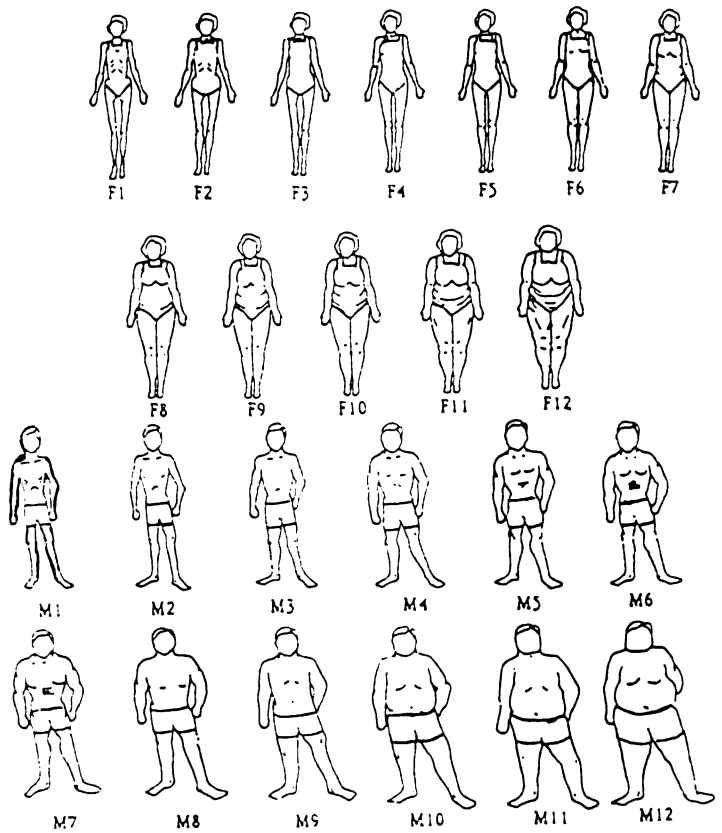
Fourth, this study was limited by its correlational nature. While it is easy to conclude that heavy media doses and identification with media celebrities lead to body dissatisfaction, correlations cannot indicate causality. It is possible that people who are already dissatisfied with their bodies seek out certain types of television or magazines to establish an ideal for themselves and to learn how to achieve it. By utilizing experimental methodology, future research could determine causality and maintain better control over the types of media content to which the subjects are exposed.

STUDY IMPLICATIONS

This study established a relationship between media exposure and body dissatisfaction, the idealization of certain body type characteristics, and dieting and exercise. At best, adolescents who experience such dissatisfaction may become preoccupied with attaining a body type that is unachievable for most people; at worst, their dissatisfaction may lead to the development of eating disorders. Further research in this subject area may help to better define the relationships between predictor variables and body dissatisfaction. However, given the potentially negative outcomes of body dissatisfaction, it is also important to investigate whether certain factors may counter the harmful effects of exposure to the ideal body stereotypes portrayed in the media. Such

analyses may encourage society to take a more active role in helping teens to develop a positive body image.

Figure 1: Ideal Body Subscale



APPENDICES

APPENDIX A

APPENDIX A

ITEMS REMOVED AFTER PRETEST

How often do you read these men's fashion magazines?

Details

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Esquire

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

GQ

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

How often do you read these men's health magazines?

Men's Health

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Muscle and Fitness

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

APPENDIX B

APPENDIX B

MALE QUESTIONNAIRE

Watching Television

1. About how many hours **per week** do you watch the following types of television programs? Please circle one answer for each question.

Daytime Soap Operas (**Days of Our Lives, General Hospital,** etc.)

0 1 2 3 4 5 6 7 8 9 10 11 or more hours

Sports (football or basketball games, gymnastics, figure skating, tennis, etc.)

0 1 2 3 4 5 6 7 8 9 10 11 or more hours

Music Videos (on MTV, VH-1, etc.)

0 1 2 3 4 5 6 7 8 9 10 11 or more hours

2. Now, think about your average school day (Monday-Friday).

How much television (in hours) do you usually watch in the morning before you go to school?

0 1 2 3 4 or more hours

When you come home from school, how much television do you usually watch in the afternoon before dinner?

0 1 2 3 4 or more hours

After dinner, how long do you usually watch television in the evening?

0 1 2 3 4 or more hours

3. How much television do you watch on a typical Saturday?

0 1 2 3 4 5 6 7 8 9 or more hours

4. How much television do you watch on a typical Sunday?

0 1 2 3 4 5 6 7 8 9 or more hours

5. How often do you watch these weekly television programs?

Beverly Hills, 90210

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Boy Meets World

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Clueless

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

ER

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Friends

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Hang Time

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Lois & Clark

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Melrose Place

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Moesha

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

NYPD Blue

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Party of Five

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Relativity

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Suddenly Susan

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

The Single Guy

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

6. How often do you watch these **daily** television programs?

Baywatch

Several times a week	Once a week	Once every 2-3 weeks	About once a month	Never

California Dreams

Several times a week	Once a week	Once every 2-3 weeks	About once a month	Never

Saved by the Bell

Several times a week	Once a week	Once every 2-3 weeks	About once a month	Never

Magazine Reading

How often do you read these sports magazines?

Inside Sports

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Runner's World

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Ski

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Sport

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Sports Illustrated

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Tennis

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

The Sporting News

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

How do you feel about how you look? (Please circle one answer for each question)

1. I'm too heavy.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I am satisfied with the shape of my body.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I'm satisfied with my weight.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I wish I could gain some weight.

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. When I look into a full-length mirror, I'm satisfied with what I see.

Strongly Disagree Disagree Neutral Agree Strongly Agree

6. I'm confident that when other people look at me, they are favorably impressed.

Strongly Disagree Disagree Neutral Agree Strongly Agree

7. I would be happier with my body if I could get rid of some of my body fat.

Strongly Disagree Disagree Neutral Agree Strongly Agree

8. I wish I could lose some weight.

Strongly Disagree Disagree Neutral Agree Strongly Agree

9. I diet because I want to have a thinner body.

Strongly Disagree Disagree Neutral Agree Strongly Agree

10. I wish I were more muscular.

Strongly Disagree Disagree Neutral Agree Strongly Agree

11. I wish I were thinner.

Strongly Disagree Disagree Neutral Agree Strongly Agree

12. I am satisfied with the shape of my body.

Strongly Disagree Disagree Neutral Agree Strongly Agree

13. My arms are

Too Small Just Right Too Large

14. My chest is

Too Small Just Right Too Large

15. My thighs are

Too Small Just Right Too Large

16. My stomach is

Too Small Just Right Too Large

17. My waist is

Too Small Just Right Too Large

18. My butt is

Too Small Just Right Too Large

19. My hips are

Too Small Just Right Too Large

How often do you do the following things?

1. Lift weights.

several times a week	once a week	once every two weeks	once every month	less than once a month	Never

2. Play sports like soccer, basketball, field hockey, or gymnastics.

several times a week	once a week	once every two weeks	once every month	less than once a month	Never

3. Skip meals.

several times a week	once a week	once every two weeks	once every month	less than once a month	Never

4. Diet in order to control your weight.

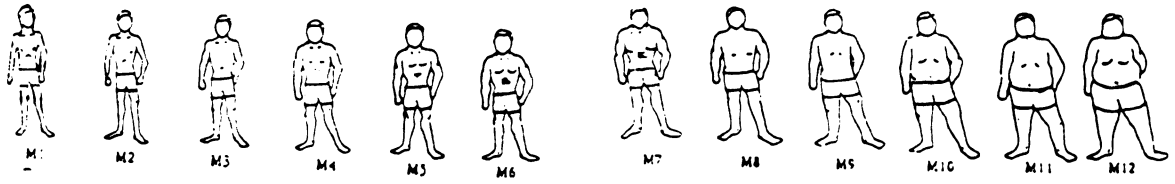
several times a week	once a week	once every two weeks	once every month	less than once a month	Never

5. Engage in cardiovascular activities like running, swimming, aerobics, or biking.

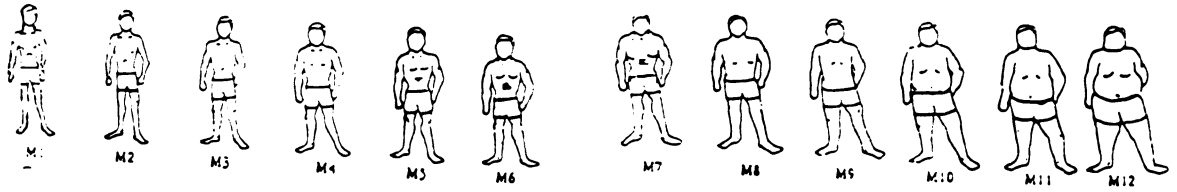
several times a week	once a week	once every two weeks	once every month	less than once a month	Never

The Ideal Body Type

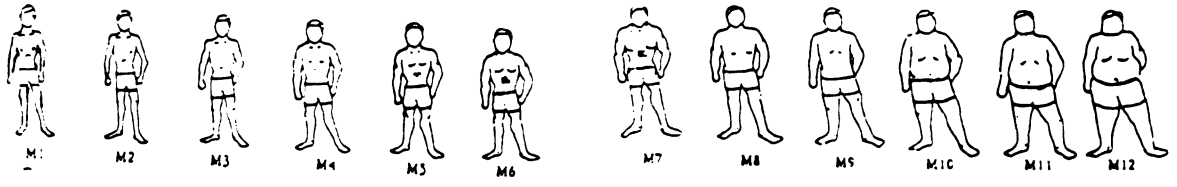
1. Of the body types shown below, circle the one body that you think is the ideal:



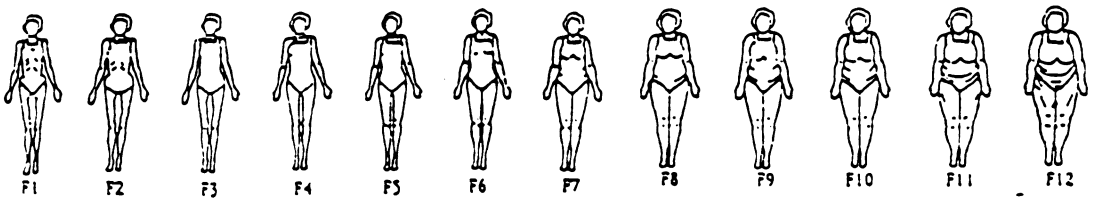
2. Circle all the bodies you think are too thin:



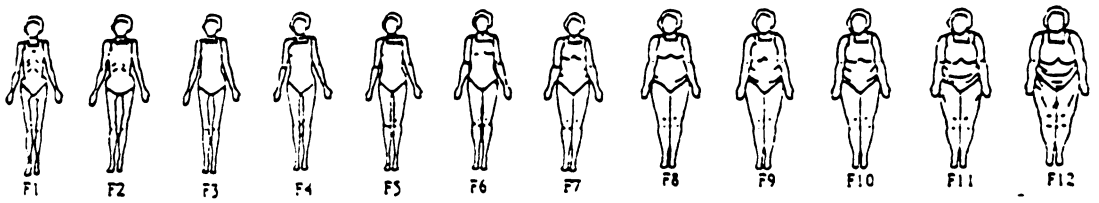
3. Circle all the bodies you think are too large:



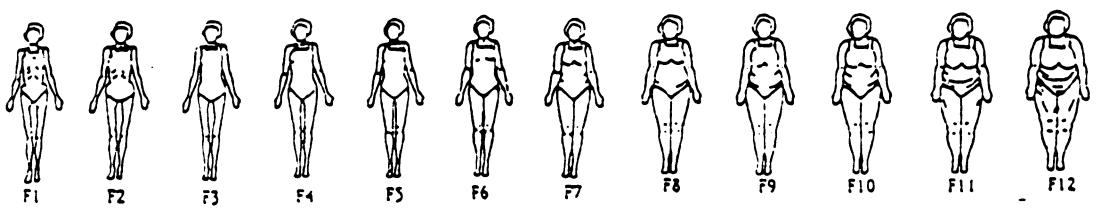
4. Circle the one female body type that you think is the ideal:



5. Circle all the bodies you think are too thin:



6. Circle all the bodies you think are too large:



Who do you want to look like?

Think of television stars like George Clooney (Dr. Ross on **ER**), Dean Cain (Clark/Superman on **Lois & Clark**), Will Smith (Will on **The Fresh Prince**), Matt Le Blanc (Joey on **Friends**), Luke Perry (Dylan on **90210**), and Andrew Shue (Billy on **Melrose Place**). Please tell us what you think of men like these:

1. I wish I looked like these men.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I admire men like these.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I would like to have the body that these men have.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Now, think of male athletes like Michael Jordan, Steve Young, Ken Griffey, Jr., Grant Hill, Danny Weurffel, and Brett Favre. What do you think about men like these:

1. I wish I looked like these men.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I admire men like these.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I think these men are handsome.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I would like to have the body that these men have.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Whose opinion matters to you?

Think of the people who express an opinion about your appearance. How important are these people's opinions to you?

1. Mother

Very Important Important Not Very Important Not Important Not Applicable

2. Friends

Very Important Important Not Very Important Not Important Not Applicable

3. Classmates

Very Important Important Not Very Important Not Important Not Applicable

4. Brother(s)

Very Important Important Not Very Important Not Important Not Applicable

5. Father

Very Important Important Not Very Important Not Important Not Applicable

6. Sister(s)

Very Important Important Not Very Important Not Important Not Applicable

Now think about the opinions these people express about your appearance. Would you say that they are positive, neutral, negative, or not applicable (the person does not express an opinion)?

1. Mother

Positive Neutral Negative Not Applicable

2. Friends

Positive Neutral Negative Not Applicable

3. Father

Positive Neutral Negative Not Applicable

4. Classmates

Positive Neutral Negative Not Applicable

5. Brother(s)

Positive Neutral Negative Not Applicable

6. Sister(s)

Positive Neutral Negative Not Applicable

We would like to know a little more about you.

1. How old are you? ___

2. Are you? MALE FEMALE

3. Are you (Circle all that apply):

African-American/Black Asian-American Caucasian/White

Native-American/Indian Hispanic/Latino Other _____

4. What is your height?_____

5. How much do you weigh?_____

THANK YOU VERY MUCH FOR YOUR TIME AND EFFORT!

APPENDIX C

APPENDIX C

FEMALE QUESTIONNAIRE

Watching Television

1. About how many hours **per week** do you watch the following types of television programs? Please circle one answer for each question.

Daytime Soap Operas (**Days of Our Lives, General Hospital,** etc.)

0 1 2 3 4 5 6 7 8 9 10 11 or more hours

Sports (football or basketball games, gymnastics, figure skating, tennis, etc.)

0 1 2 3 4 5 6 7 8 9 10 11 or more hours

Music Videos (on MTV, VH-1, etc.)

0 1 2 3 4 5 6 7 8 9 10 11 or more hours

2. Now, think about your average school day (Monday-Friday).

How much television (in hours) do you usually watch in the morning before you go to school?

0 1 2 3 4 or more hours

When you come home from school, how much television do you usually watch in the afternoon before dinner?

0 1 2 3 4 or more hours

After dinner, how long do you usually watch television in the evening?

0 1 2 3 4 or more hours

3. How much television do you watch on a typical Saturday?

0 1 2 3 4 5 6 7 8 9 or more hours

4. How much television do you watch on a typical Sunday?

0 1 2 3 4 5 6 7 8 9 or more hours

5. How often do you watch these weekly television programs?

Beverly Hills, 90210

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Boy Meets World

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Clueless

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

ER

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Friends

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Hang Time

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Lois & Clark

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Melrose Place

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Moesha

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

NYPD Blue

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Party of Five

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Relativity

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Suddenly Susan

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

The Single Guy

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

6. How often do you watch these **daily** television programs?

Baywatch

Several times a week	Once a week	Once every 2-3 weeks	About once a month	Never

California Dreams

Several times a week	Once a week	Once every 2-3 weeks	About once a month	Never

Saved by the Bell

Several times a week	Once a week	Once every 2-3 weeks	About once a month	Never

Magazine Reading

1. How often do you read these teen fashion magazines? (CIRCLE YOUR ANSWER)

Sassy

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Seventeen

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Teen

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

YM

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

2. How often do you read these women's fashion magazines?

Allure

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Cosmopolitan

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Elle

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Glamour

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Mademoiselle

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Marie Claire

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

Vogue

Almost every week	Once every 2-3 weeks	About once a month	Less than once a month	Never

How do you feel about how you look? (Please circle one answer for each question)

1. I'm too heavy.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I am satisfied with the shape of my body.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I'm satisfied with my weight.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I wish I could gain some weight.

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. When I look into a full-length mirror, I'm satisfied with what I see.

Strongly Disagree Disagree Neutral Agree Strongly Agree

6. I'm confident that when other people look at me, they are favorably impressed.

Strongly Disagree Disagree Neutral Agree Strongly Agree

7. I would be happier with my body if I could get rid of some of my body fat.

Strongly Disagree Disagree Neutral Agree Strongly Agree

8. I wish I could lose some weight.

Strongly Disagree Disagree Neutral Agree Strongly Agree

9. I diet because I want to have a thinner body.

Strongly Disagree Disagree Neutral Agree Strongly Agree

10. I wish I were more muscular.

Strongly Disagree Disagree Neutral Agree Strongly Agree

11. I wish I were thinner.

Strongly Disagree Disagree Neutral Agree Strongly Agree

12. I am satisfied with the shape of my body.

Strongly Disagree Disagree Neutral Agree Strongly Agree

13. My arms are

Too Small Just Right Too Large

14. My bust is

Too Small Just Right Too Large

15. My thighs are

Too Small Just Right Too Large

16. My stomach is

Too Small Just Right Too Large

17. My waist is

Too Small Just Right Too Large

18. My butt is

Too Small Just Right Too Large

19. My hips are

Too Small Just Right Too Large

How often do you do the following things?

1. Lift weights.

several times a week	once a week	once every two weeks	once every month	less than once a month	Never

2. Play sports like soccer, basketball, field hockey, or gymnastics.

several times a week	once a week	once every two weeks	once every month	less than once a month	Never

3. Skip meals.

several times a week	once a week	once every two weeks	once every month	less than once a month	Never

4. Diet in order to control your weight.

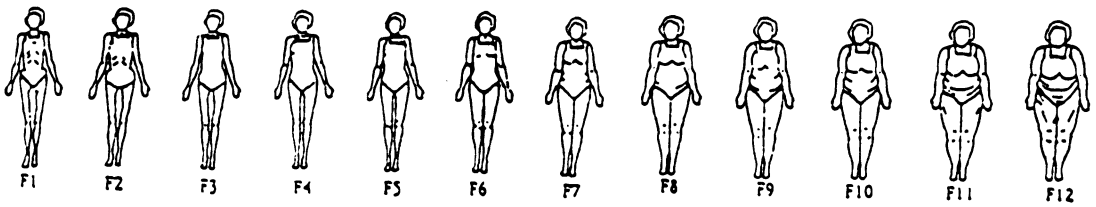
several times a week	once a week	once every two weeks	once every month	less than once a month	Never

5. Engage in cardiovascular activities like running, swimming, aerobics, or biking.

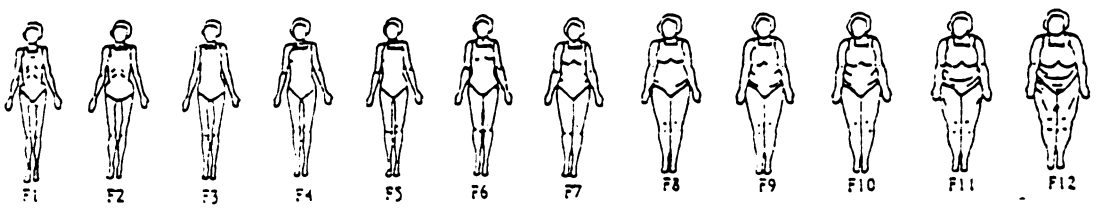
several times a week	once a week	once every two weeks	once every month	less than once a month	Never

The Ideal Body Type

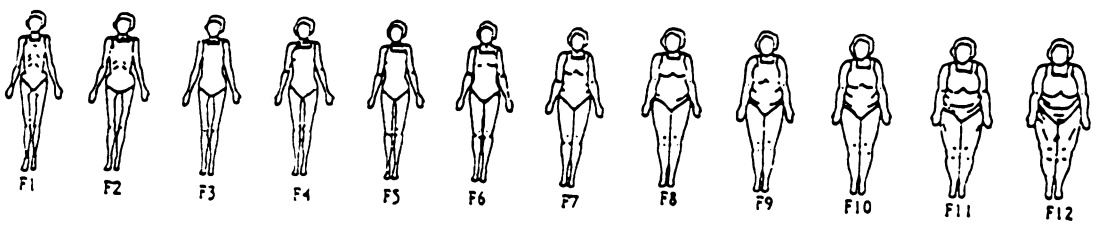
1. Of the body types shown below, circle the one body that you think is the ideal:



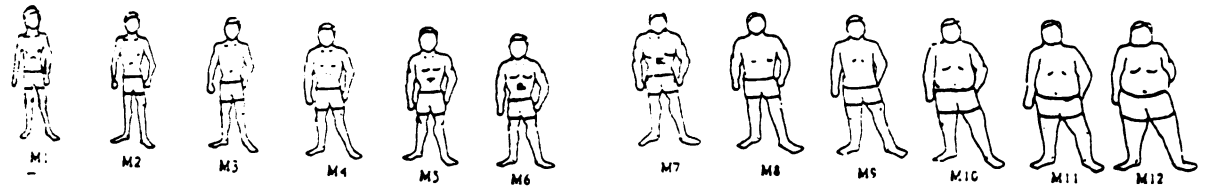
2. Circle all the bodies you think are too thin:



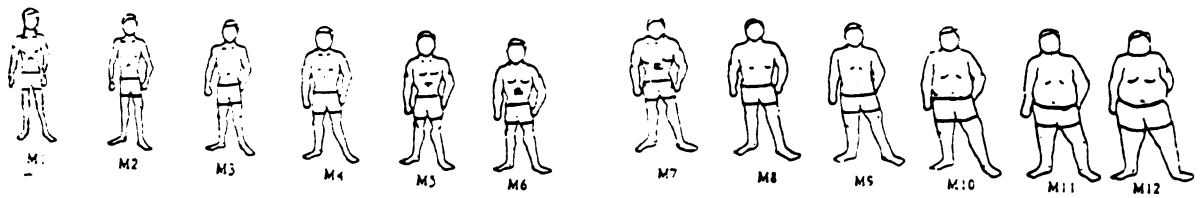
3. Circle all the bodies you think are too large:



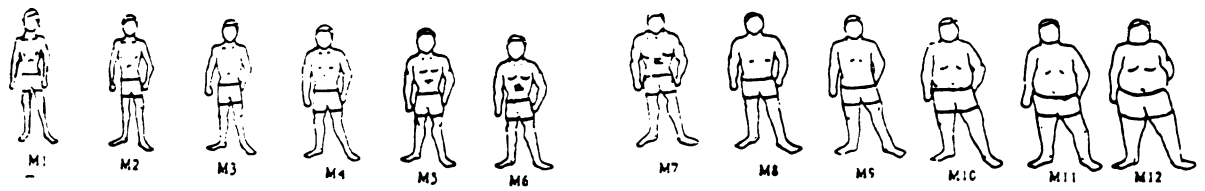
4. Circle the one male body type that you think is the ideal:



5. Circle all the bodies you think are too thin:



6. Circle all the bodies you think are too large:



7. What do you think is the ideal clothing size for women your age?

1/2 3/4 5/6 7/8 9/10 11/12

8. What do you think is the ideal bust measurement for women your age?
(The measurements below are in inches--circle one)

30 inches or less 32 34 36 38 40 over 40 inches

9. What do you think is the ideal waist measurement for women your age?

19 inches or less 20 21 22 23 24 25 26 27 28 over 28 inches

10. What do you think is the ideal hip measurement for women your age?

26 inches or less 27 28 29 30 31 32 33 34 35 36 over 36 inches

Who do you want to look like?
Think of the female models you see in fashion magazines, like Kate Moss, Naomi Campbell, Cindy Crawford, Amber Valetta, Tyra Banks, and Claudia Schiffer. Please tell us your opinion of women like these:

1. I wish I looked like these women.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I admire women like these.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I think that these women are attractive.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I would like to have the body that these women have.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Now, think of television stars like Jennifer Aniston or Courteney Cox (Rachel and Monica on **Friends**), Teri Hatcher (Lois on **Lois & Clark**), Jennie Garth (Kelly on **Beverly Hills, 90210**), Brandy (Moesha on **Moesha**), and Jennifer Love Hewitt (Sarah on **Party of Five**). In the following statements, tell us your opinion of them by circling the appropriate answer:

1. I wish I looked like these women.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I admire women like these.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I think that these women are attractive.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I would like to have the body that these women have.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Whose opinion matters to you?

Think of the people who express an opinion about your appearance. How important are these people's opinions to you?

1. Mother

Very Important Important Not Very Important Not Important Not Applicable

2. Friends

Very Important Important Not Very Important Not Important Not Applicable

3. Classmates

Very Important Important Not Very Important Not Important Not Applicable

4. Brother(s)

Very Important Important Not Very Important Not Important Not Applicable

5. Father

Very Important Important Not Very Important Not Important Not Applicable

6. Sister(s)

Very Important Important Not Very Important Not Important Not Applicable

Now think about the opinions these people express about your appearance. Would you say that they are positive, neutral, negative, or not applicable (the person does not express an opinion)?

1. Mother

Positive Neutral Negative Not Applicable

2. Friends

Positive Neutral Negative Not Applicable

3. Father

Positive Neutral Negative Not Applicable

4. Classmates

Positive Neutral Negative Not Applicable

5. Brother(s)

Positive Neutral Negative Not Applicable

6. Sister(s)

Positive Neutral Negative Not Applicable

We would like to know a little more about you.

1. How old are you? ___

2. Are you? MALE FEMALE

3. Are you (Circle all that apply):

African-American/Black Asian-American Caucasian/White

Native-American/Indian Hispanic/Latino Other _____

4. What is your height?_____

5. How much do you weigh?_____

THANK YOU VERY MUCH FOR YOUR TIME AND EFFORT!

APPENDIX D

APPENDIX D

Consent Form

This is not a test. There are no right or wrong answers, and you do not need to put your name on this paper.

Most of the questions are about television, magazines, and yourselves. If there are any questions you do not wish to answer, leave them blank.

When we begin, you can go through the survey by yourself. If you have any questions, raise your hand and we will come over and answer them. You do not have to participate in this survey if you do not want to. If you decide not to finish it after you have started, just turn the paper over. Otherwise, turn the paper over when you are finished.

Thanks for your help! If you have further questions about this research project, you may contact Linda Ver Steeg at (517) 432-1332.

References

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, N.J.: Prentice Hall.

Billewicz, W.Z., Kemsley, W.F.F., & Thompson, A.M. (1962). Indices of adiposity. *British Journal of Preventive Social Medicine, 16,* 183-188.

Blouin, A.G., & Goldfield, G.S. (1995). Body image and steroid use in male bodybuilders. *The International Journal of Eating Disorders, 18(2),* 159-165.

Boster, F. (1996). COM 901: Communication Design I. Unpublished class notes.

Brumberg, J.J. (1988). *Fasting girls: The history of anorexia nervosa.* Cambridge, MA: Harvard University Press.

Brumberg, J.J. (1997). *The body project: An intimate history of American girls.* New York: Random House, Inc.

Carbonneau, M.R., Haring, P., Brown, B., Ferguson, A., Chambliss, C. (1993). *Predictors of adolescent self appraisal: Perceptions of television characters vs. peers.* (Report No. CG-024-898). Ursinus College. (ERIC Document Reproduction Service No. ED 358 405)

Cash, T.F., & Henry, P.E. (1995). Women's body images: The results of a national survey in the U.S.A. *Sex Roles, 33(1-2),* 19-28.

Cash, T.F., Winstead, B.W., & Janda, L.H. (1986). The great American shape-up: Body image survey report. *Psychology Today, 20(4),* 30-37.

Cassidy, C.M. (1991). The good body: When big is better. *Medical Anthropology, 13,* 181-213.

Cogan, J.C., Bhalla, S.K., Sefa-Dedeh, A., & Rothblum, E.D. (1996). A comparison study of United States and African students on perceptions of obesity and thinness. *Journal of Cross-Cultural Psychology, 27,* 98-113.

Fichter, M.M., Weyerer, S., Sourdi, L., & Sourdi, Z. (1983). *Anorexia nervosa. Recent developments in research.* New York: Liss.

Cok, F. (1990). Body image satisfaction in Turkish adolescents. *Adolescence, 98,* 409-413.

Crandall, C.S. (1988). Social contagion of binge eating. *Journal of Personality and Social Psychology, 55(4),* 588-598.

DeFleur, M.L., & Ball-Rokeach, S.J. (1989). *Theories of mass communication.* White Plains, NY: Longman.

Dionne, M., Davis, C., Fox, J., & Gurevich, M. (1995). Feminist ideology as a predictor of body dissatisfaction in women. *Sex Roles, 33(3/4),* 277-287.

Evans, E.D., Rutberg, J., Sather, C., Turner, C. (1991). Content analysis of contemporary teen magazines for adolescent females. *Youth & Society, 23(1),* 99-120.

Fallon, A. (1990). Culture in the mirror: Sociocultural determinants of body image. In T. Cash & T. Pruzusky (Eds.), *Body images: Development deviance and change* (pp. 80-109). New York: Guildford.

Felts, M., Tavasso, D., Chenier, T., & Dunn, P. (1992). Adolescents' perceptions of relative weight and self-reported weight loss activities. *Journal of School Health, 62(8),* 372-376.

Furnham, A., & Alibhai, N. (1983). Cross-cultural differences in the perception of female body shapes. *Psychological Medicine, 13,* 829-837.

Furnham, A. & Baguma, P. (1994). Cross-cultural differences in the evaluation of male and female body shapes. *International Journal of Eating Disorders, 15,* 81-89.

Garner, D.M., Garfinkel, P.E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women. *Psychological Reports, 47,* 483-491.

Garner, D.M., Olmstead, M.P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders, 2,* 15-34.

Garrow, J.S., & Webster, J. (1985). Quetelet's Index (W/H2) as a measure of fatness. *International Journal of Obesity, 9,* 147-153.

Griffin, E. (1991). *A first look at communication theory.* New York: McGraw-Hill, Inc.

Harrison, K., & Cantor, J. (1997). The relationship between media consumption and eating disorders. *Journal of Communication, 47(1),* 40-67.

Heinberg, L.J., & Thompson, J.K. (1992). Social comparison: Gender, target importance ratings, and relation to body image disturbance. *Journal of Social Behavior and Personality, 7,* 335-344.

Heinberg, L.J., & Thompson, J.K. (1995). Body image and televised images of thinness and attractiveness: A controlled laboratory investigation. *Journal of Social and Clinical Psychology, 14(4),* 325-338.

Huddy, D.C., Nieman, D.C., & Johnson, R.L. (1993). Relationship between body image and percent body fat among college male varsity athletes and nonathletes. *Perceptual and Motor Skills, 77,* 851-857.

Kelly, K.J. (1996, August 26). Magazines stay on downward course in 1st half. *Advertising Age, 67(35),* 25.

Keys, A., Findanza, F., Karvonen, M.J., Kimura, N., & Taylor, H.L. (1972). Indices of relative weight and obesity. *Journal of Chronic Disease, 25,* 329-343.

Jackson, L.A. & McGill, O.D. (1996). Body type preferences and body characteristics associated with attractive and unattractive bodies by African Americans and Anglo Americans. *Sex Roles, 35(5/6),* 295-307.

Lauber, C.A. (1982). *Perception of body image in adolescents aged 14-16.* Unpublished master's thesis, Michigan State University, East Lansing.

McMullen, J.L. (1984). *The effects of physical stereotypes of males and females in media on body-image and self-esteem.* Unpublished doctoral dissertation, University of Texas, Austin.

Mortenson, G.M., Hoerr, S.L., & Garner, D.M. (1993). Predictors of body satisfaction in college women. *Journal of the American Dietetic Association, 93(9),* 1037-1039.

Mumford, D.B., Whitehouse, A.M., & Choudry, I.Y. (1992). Survey of eating disorders in English-medium schools in Lahore, Pakistan. *International Journal of Eating Disorders, 11,* 173-184.

Myers, P.N., & Biocca, F.A. (1992). The elastic body image: The effect of television advertising and programming on body image distortions in young women. *Journal of Communication, 42(3),* 108-133.

Nasser, M. (1986). Comparative study of the prevalence of abnormal eating attitudes among Arab female students at both London and Cairo universities. *Psychological Medicine, 16,* 621-625.

Nasser, M. (1988). Culture and weight consciousness. *Journal of Psychosomatic Research, 32,* 573-577.

Nemeroff, C.J., Stein, R.I., Diehl, N.S., Smilack, K.M. (1994). From the Cleavers to the Clintons: Role choices and body orientation as reflected in magazine article content. *International Journal of Eating Disorders, 16(2),* 167-176.

Newman, I.M. (1991). *Eating and exercising: Nebraska adolescents' attitudes and behaviors.* (Report No. CG-023-954). Lincoln, NE: Health Education, Inc. (ERIC Document Reproduction Service No. ED 340 997)

Newman, L.B., & Dodd, D.K. (1995). Self-esteem and magazine reading among college students. *Perceptual and Motor Skills, 81,* 161-162.

Perdue, L., & Silverstein, B. (1985, March). *A comparison of the weights and ages of women and men on television.* Paper presented at the annual meeting of the Eastern Psychological Association, Boston, MA.

Petrie, T.A., Austin, L.J., Crowley, B.J., Helmcamp, A., Johnson, C.E., Lester, R., Rogers, R., Turner, J., & Walbrick, K. (1996). Sociocultural expectations of attractiveness for males. *Sex Roles, 35 (9/10),* 581-602.

Pierce, K. (1990). A feminist theoretical perspective on the socialization of teenage girls through *Seventeen* magazine. *Sex Roles, 23(9/10),* 491-500.

Pike, K.M., & Rodin, J. (1991). Mothers, daughters, and disordered eating. *Journal of Abnormal Psychology, 100(2),* 198-204.

Rodin, J., Silberstein, L.R., & Streigel-Moore, R.H. (1985). Women and weight: A normative discontent. In T.B. Sonderegger (Ed.), *Nebraska symposium on motivation: Vol 32. Psychology and gender* (pp. 267-307). Lincoln: University of Nebraska Press.

Rothblum, E.D. (1990). Women and weight: Fad and fiction. *Journal of Psychology, 124,* 5-24.

Rubin, A.M. (1994). Media uses and effects: A uses-and-gratifications perspective. In J. Bryant & D. Zillmann (Eds.), *Media Effects: Advances in theory and research* (pp. 417-436). Hillsdale, NJ: Lawrence Erlbaum Associates.

Schilder, P. (1950). *The image and appearance of the human body.* New York: International University Press.

Silverstein, B., Perdue, L., Peterson, B., & Kelly, E. (1986). The role of the mass media in promoting a thin standard of bodily attractiveness for women. *Sex Roles, 14,* 519-532.

Snow, J.T., & Harris, M.B. (1986). An analysis of weight and diet content in five women's interest magazines. *The Journal of Obesity and Weight Regulation, 5(4),* 194-214.

Sobal, J. (1991). Obesity and socioeconomic status: A framework for examining relationships between physical and social variables. Special issue: Bigger is better? Biocultural dynamics of body shape. *Medical Anthropology, 13,* 231-247.

Stice, E., Schupak-Neuberg, E., Shaw, H.F., & Stein, R.I. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. *Journal of Abnormal Psychology, 103(4),* 836-840.

Stice, E., & Shaw, H.F. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. *Journal of Social and Clinical Psychology, 13(3),* 288-308.

Tan, A.S. (1985). *Mass communication theories and research.* New York: Macmillan.

Tiggemann, M., & Pickering, A.S. (1996). Role of television in adolescent women's body dissatisfaction and drive for thinness. *International Journal of Eating Disorders, 20(2),* 199-203.

Tiggemann, M., & Rothblum, E.D. (1988). Gender differences in social consequences of perceived overweight in the United States and Australia. *Sex Roles, 18,* 75-86.

Waller, G., Hamilton, K., & Shaw, J. (1992). Media influences on body size estimation in eating disordered and comparison subjects. *British Review of Bulimia and Anorexia Nervosa, 6(2),* 81-87.