Female Adolescent Role Models and Body Image

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FEMALE ADOLESCENT ROLE MODELS
AND BODY IMAGE

by

Tracy L. McBride Funk

A thesis submitted in partial fulfillment
of the requirements for the degree
of
MASTER OF SCIENCE
in
Family and Human Development

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

2001
ABSTRACT

Female Adolescent Role Models and Body Image

by

Tracy L. Funk, Master of Science
Utah State University, 2001

Major Professor: Dr. Randall M. Jones
Department: Family and Human Development

This study primarily examined the relationship between role model choices and body image of female adolescents. More specifically, this study sought to examine the relationship between the reasons that adolescent females give for choosing a role model and body image. Because body image dissatisfaction has been found to be associated with self-esteem and eating disorders such as anorexia and bulimia nervosa, these variables also were investigated. Body image was examined by using two measures of the body image construct: the Figure Rating Scale and the Multidimensional Body-Self Relations Questionnaire (MBSRQ). Both were used in order to capture a greater portion of the body image construct, as well as to examine possible differences between the measures.

Eating disordered behaviors were measured using the Eating Attitudes Test (EAT-26) and self-esteem was measured with the Rosenberg Self-Esteem Scale (RSES). Participants were asked to list one role model within their family and one role model outside of their family, and to list why they selected those specific people as their role models. Role models were coded based upon the reasons provided by participants. Those who listed physical reasons such as “she has a good body,” “she is beautiful,” or “she is skinny” were coded as “Group 1 - Physical,” and those who chose all other reasons were labeled “Group 2 - Non-physical.”
Females, ages 13-15 and 18-23, voluntarily participated in this study. The majority participated in exchange for extra credit in specific courses at their freshman center or university. A prepared packet (including consent forms, instructions, and questionnaire) was sent home with willing participants to fill out and return. In total, 159 packets were returned.

Statistical analyses indicated that body image is highly correlated with eating disordered behaviors and low self-esteem. Those scoring high on the measure of eating disordered behaviors (EAT-26) had, on average, even lower self-esteem as indicated by scores on the Rosenberg Self-Esteem Scale (RSES). However, statistically significant differences between body image and reasons for choosing a role model (physical vs. non-physical) appeared only on weight and/or shape-related aspects of the body image measures. It is not known whether differences between type of role model and body image occurred due to actual weight / Body Mass Index (BMI), or if those with greater weight and/or shape-related concerns chose more physical role models. Age differences among participants appeared on type of role model chosen, with the younger participants, ages 13-15, choosing more role models based upon physical characteristics than those ages 18-23. However, no differences were found between age of participant and level of body image.
ACKNOWLEDGMENTS

I would like to sincerely thank the following people with whose help and support I have been able to accomplish this goal:

My parents, Karen and Craig McBride
Ron Funk - my best friend, partner, and husband
My major professor, Randall M. Jones, Ph.D - without whose help, support, motivating words, and knowledge concerning statistical and research methods, this thing would have never gotten done!
Barbara Farris at the freshman center for volunteering so much of her time.
My role model and committee member - Shelley L. Knudsen Lindauer, Ph.D.

and

Brent C. Miller, Ph.D. - committee member

Special thanks also go to the following individuals for allowing me to use their measures in this study:

Dr. Albert Stunkard - The Figure Rating Scale (FRS)
Dr. David M. Garner - The Eating Attitudes Test (EAT-26)
Dr. Thomas F. Cash - The Multidimensional Body-Self Relations Questionnaire (MBSRQ)

With Many Thanks -

Tracy Funk
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CHAPTER I
INTRODUCTION

"I would have girls regard themselves not as adjectives but as nouns...." (Stanton, cited in Brumberg, 1997, p. xxxii).

Adolescence is a time when dramatic development takes place in the physical and social-emotional domains. This is a time when the body of childhood begins to give way to a new body, one that signifies the passage into adulthood. During this time adolescents consolidate what they have learned from their families, community, schools, and the larger culture and build upon it to form an identity (Schickedanz, Schickedanz, Hansen, & Forsyth, 1993).

Identity was studied extensively by the theorist, Erik Erikson, who had a great interest in personality development. He proposed eight major life stages, each of which pose a psychosocial crisis which must be resolved before one can successfully navigate subsequent stages. The fifth stage occurs during adolescence and the psychosocial crisis to be overcome is identity verses role confusion, which involves the challenge of developing an identity, a clear sense of who one is. Erikson believed that the adolescent may struggle with questions concerning who one is and where one is going in life (Erikson, 1968). At this time of extensive identity formation where one is, as Weiten (1989) stated, "working out a stable concept of oneself as a unique individual and embracing an ideology or system of values that provides a sense of direction" (p. 411), the role models that one chooses to watch, know, and emulate can have a profound influence upon an individual at this time in life.

Addressing identity, Brumberg notes that adolescent "girls today face the issues girls have always faced- Who am I? Who do I want to be?-but their answers, more than ever before, revolve around the body" (1997, p. xxiv). Brumberg notes that this is because of the culture that surrounds them. Young girls come to age "in a society where female identity is so closely linked to purchases in the marketplace" (1997, pp. 53-54).
Physical changes are of great importance to adolescents in general but especially of great concern to adolescent females. Society has replaced the more normative female body with cultural expectations of a body which only a minority of women can truly possess naturally. At the present time an unnatural body stands as the prevailing model for developing girls to emulate. It is an undertaking that will consume much of the females resources, time, and physical and mental energy - all to reach what is purported to be reachable, but which is, for most, unattainable (see Brumberg, 1997; Hesse-Biber, 1996; Kilbourne, 1994; Tavris, 1992). Female adolescents are bombarded with images of women, and hear their changing bodies being talked about, compared, and judged against societal standards (Brown & Gilligan, 1992). It only seems obvious that most female adolescents would like to meet the standards that this "ideal woman" of our culture presents, in order to feel accepted and be acceptable among others, such as peers, family, teachers, and those in the community. Since "she," the ideal image so prolifically promoted in popular culture, is associated with that which is good and beautiful, even successful at this time in American culture, "she" is the one that stories happen to.

A girl learns that stories happen to "beautiful" women, whether they are interesting or not. And, interesting or not, stories do not happen to women who are not "beautiful"... Her early education in the myth makes her susceptible to the heroines of adult women's mass culture.... (Wolf, 1991, p. 61)

American culture, like cultures in many other industrial countries, appears to be tied together by the numerous types of media which are uniformly available to most every American citizen, rich or poor, in one way or another. MTV in Utah, is MTV in New York. When one uses the media, ideas, associations, generalizations, in effect social learning takes place very easily. The media has the power to socialize from early childhood and into adulthood; it has the potential to influence people, using many methods, into accepting and rejecting ideas and images, sensitizing people to the images portrayed so that the images and ideas become the norm (see
Bandura, 1977, 1986; Brown & Gilligan, 1992; Hutchinson, 1994). Whether one actively seeks to remain pure of media influence or not, there is no way to avoid the dominant images. These images are found everywhere. Some examples include magazine racks which are easily visible in almost every store, billboards on roadsides, in the lyrics of songs, and in the attitudes of men and women presenting the news. “Values which in the past were shaped at a community level and transmitted slowly form parent to child, have now been replaced by media versions of the world” (Hutchinson, 1994, p. 154).

Brumberg (1997) added that, in today’s world, reaching sexual maturity is more difficult than it was a century ago due to the changes in history which have resulted in a clash between biology and culture. At present, American society provides little social protection to girls, especially compared to the past, leaving the development of girls largely unsupported. This contributes to girls being highly susceptible “to the excesses of popular culture and to pressure from peer groups” (Brumberg, 1997, p. xvii) at a time when sexual maturation occurs earlier than ever before.

Although sexual development - the onset of menstruation and the appearance of breasts - occurs in every generation, a girl's experience of these inevitable biological events is shaped by the world in which she lives, so much so, that each generation, at its own point in history, develops its own characteristic body problems and projects. Every girl suffers some kind of adolescent angst about her body; it is the historical moment that defines how she reacts to her changing flesh. From the perspective of history, adolescent self-consciousness is quite persistent, but its level is raised or lowered, like the water level in a pool, by the cultural and social setting. (Brumberg, 1997, xviii).

By the age of 5, girls have been socialized by family and culture to look down on obesity and embrace the slim ideal (Wooley & Wooley, 1986). After all, the “ugly step-sisters” in the story
of Cinderella are not the ones who can win over the prince. Physical unattractiveness, paired with negative personality traits, deter the Hero from seeking these women. At the same time male characters such as a “Beast,” “Hunchback,” or “Grinch” who possess, either or both, physical unattractiveness and negative personality traits are portrayed as winning the love, patience, or adoration of beautiful women, women whom many young girls begin to dream of becoming like. This is only one example of a cultural message that may be easily internalized during childhood and taken, with further reinforcement, to adolescence where the images can be accepted or rejected depending upon many other factors of childhood and adolescence. The vulnerability-stressor model proposed by Levine, Smolak, and Hayden (1994) suggests that subscription to the thin ideal begins in childhood with the influence of sociocultural factors such as family, peers, community, and the media. The vulnerability-stressor model asserts that there is continuity between childhood and adolescence in regard to the internalization of the thin ideal due to sociocultural factors. All of these social groups consist of possible role models, models of behavior, ideas, and values. In each of these cultural sectors, a multitude of models can be found who consistently reinforce the importance of female beauty. Role models are products or representations of the culture in which they live.

Today the ideal image that women aspire to consists of not only a thin figure, but also a muscular body, which contrasts with the traditional softness associated with femininity in the past. Breast size, weight, and toned, firm thighs and buttocks are some of the dominant body projects which many women spend time on, mentally and physically, in America today (Brumberg 1997; Tavris, 1992). Thirty years ago, the most common way to lose weight consisted of watching the number of calories consumed and passing up meals. The idea of the feminine, soft body has been replaced by a lean, taut, body of “steel” (Brumberg, 1997). Tavris (1992) wrote that [w]ith the dawn of the 1990s, media images of women began to celebrate a hybrid form that is all but impossible for most women; big-breasted but narrow-hipped.
This hybrid reflects the ambivalence in American society toward women's roles and the expectation that women must be both professionally competent and maternal. The majority of women, including mothers of young children, work outside the home, yet we are also in an era of strong pro-maternal sentiment.

(pp. 32-33)

Corsets may be gone but the focus on shaping the female body to fit a uniform ideal is still present, and the requirements of meeting the ideal have been ratcheted upward, requiring more attention and actual work than at any other time in history. Reshaping the body through external methods has been replaced by internalization which demands actual resources such as time, work, effort, and, in many cases a large amount of money and taking possible risks to one's health and life. Women now are pressured to actually shape the body, whereas previously more external methods were relied upon (Brumberg, 1997; Tavris, 1992)

The pressure for women of all ages to adhere to the thin ideal makes it difficult to accept the body type that one has. There are different levels of body image ranging from those who are satisfied to those who are deeply distressed about their body. Although body image in itself is a huge problem for many adolescent girls, a more serious problem arises when low or distorted body image turns into an obsession to achieve perfection. The obsession to achieve the ideal body is a problem of many levels, which is not easily overcome or solved. Body preoccupation in the forms commonly seen today occupies the time and resources of girls who could be using their minds, time, and, undiscovered talents in other areas of life (see American Association of University Women [AAUW], 1994; Brumberg, 1997; Pipher, 1994; Tavris, 1992). These preoccupations with the body can also be detrimental to the health and life of young women. Anorexia nervosa, as one example, has the highest mortality rate of all the psychiatric disorders (Pipher, 1994). Much research has documented the association between poor body image and the development of eating disorders (Katzman & Wolchick, 1984; Leon, Fulkerson, Perry, &
It is thought that the more dissatisfied a woman is with her body the more drastic the means she will undertake to change (Stice, Neuberg, Shaw, & Stein, 1994).

Translation from the physical body to the body image that represents it is a complex process, prone to distortion. Most of us live with body images shaped and distorted by attitudes about being women in a society that devalues everything female. The distortion comes from many sources: the ways our parents and family related to our bodies when we were growing up; traumatic life experiences that have become ‘frozen’ into our body images; the body role modeling we have had; the acceptance or rejection of our bodies we have felt from family, peers, and important others; and the ways we have perceived our bodies to fit or not to fit the cultural image. (Hutchinson, 1994, p. 154)

The purpose of this study is to examine whether a relationship exists between the type of role models that female adolescents choose and their present body image. This study was designed to examine possible differences between females who choose role models based upon physical characteristics, and those who choose role models based on non-physical characteristics such as accomplishments, talents, personality traits, and successes. Age of subject and type of female role model chosen will also be examined to compare possible differences in choices between younger and older subjects. The following research questions will be addressed:

1. Are the role models that adolescent girls select correlated with female body image? That is, do societal role models available to young girls in this culture have an impact upon how they feel and think about their own bodies?

2. What types of cultural role models tend to be associated with low body satisfaction scores?

3. Do female adolescents choose role models based upon physical characteristics or more broad characteristics such as achievements, personality, and so forth? Does this differ by age?
4. Do the societal role models chosen by females with low body image also correlate with risk for, or present eating disordered behavior and level of self-esteem?

5. Do consciously selected role models or models in general appear to have an impact upon body image disturbance?

6. Will females identify cultural beauty ideals when they list why they selected a specific person as their role model?

The following null hypotheses will be tested:

HO 1: There is no relationship between the type of female role model\(^1\) chosen by adolescent females and level of body image.

HO 2: There is no relationship between type of role model chosen and patterns of eating disturbance associated with eating disorders.

HO 3: There is no relationship between level of self-esteem and type of role model chosen.

HO 4: There is no relationship between age of subject and type of female role model chosen (freshman center vs. university).

HO 5: There is no relationship between level of body image and patterns of eating disturbance associated with eating disorders.

HO 6: There is no relationship between level of body image and level of self-esteem.

HO 7: There is no relationship between level of body image and age of subject (freshman center vs. university).

\(^1\)Type of role model will be determined according to the reasons that adolescent girls give for choosing a specific female as their role model. Those that list one or more physical reason(s) (i.e., good body, beautiful, cute, thin) for choosing a role model will be classified into the physical role models group while those that list no physical reasons will be in the non-physical role models group.
CHAPTER II

LITERATURE REVIEW

Role Models

The influences of my teachers and of friends and lovers in my life balances the force of cultural hypnosis, the trance-inducing images of the mass media, the relentless pressure to be feminine in a misogynist setting (Halprin, 1995, p. 24).

Identification plays a large part in the socialization of children. People become who they are partly through positive and negative role modeling by people in their world (Caughey, cited in Duck, 1990). "Social learning theorists describe identification as a continuous process in which new responses are acquired as a result of direct and vicarious experiences with both parents and other models" (Duck, 1990, p. 19). Children learn through observing those people that they consider to be important in their world (Duck, 1990). These models may be teachers, parents, friends, or media figures, and each provides the child with a model for how one should behave in a particular situation (Murray, cited in Duck, 1990).

Albert Bandura was one of several theorists to add a cerebral twist to Skinner's "pure" behaviorism. This added feature of cognition (the belief that cognitive processes such as thinking, feeling, and consciousness are important aspects of being human and therefore important to study) to behaviorism was termed social learning theory. Bandura focused extensively on and contributed much to what is called observational learning. "Observational learning occurs when an organism's responding is influenced by the observation of others, who are called models" (Weiten, 1989, p. 445).

Bandura's modeling process "provides an explanation for how young women may come to believe in the thin ideal and become motivated to engage in extreme dieting behavior to meet this ideal" (Harrison, 1997, p. 482). Harrison and Cantor (1997) summarized how social learning theory is a relevant theoretical mechanism by which females procure the desire for the "ideal" slim
and toned body, the behavioral motivation to employ profound dieting strategies and instructions on how to attain the ideal body. "Two components within the social learning model, prevalence and incentives, provide an explanation of how dieting behaviors may be socially learned from the mass media" (Harrison & Cantor, 1997, p. 44).

Bandura believed that through "observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (Bandura, 1977, p. 22). Observational learning is thought to occur mainly through "symbolic representations of the modeled activities which serve as guides for appropriate performances" (p. 24). There are four fundamental processes by which observational learning occurs. These are attentional, retention, motor reproduction, and motivational processes. When one has witnessed a modeled event, the cycle of social or observational learning begins, but whether what one observes is ever drawn on again is dependent upon how or if the information cycles through the sequence of interconnected processes.

In order to learn, attention must be paid to the model and the important aspects of the modeled behavior must be discerned correctly. "Attentional processes determine what is selectively observed in the profusion of modeling influences to which one is exposed and what is extracted from such exposures" (Bandura, 1977, p. 24). There are several key components that guide what types of behavior are observed and actively attended to. Bandura labeled these as associational patterns, modeling stimuli, and observer characteristics. The selection of behaviors that one could be exposed to is narrowed simply by those with whom one associates on a regular basis. These regular patterns of association make it likely that the behavior of these models will be that which is most thoroughly learned (prevalence).

Modeling stimuli also serve an important function due to the fact that some models stand out or command attention more than others, which further narrows the selection of modeled behavior that one will attend to. Other model characteristics that make it likely that behaviors
modeled will be observed and attended to are: interpersonal attraction to a model, distinctiveness of the model, the functional value of the modeled behavior to the observer, how common or prominent the behavior is, and the intricacy of the modeled behavior. Observational learning is also influenced by characteristics of observers such as information-processing abilities, which determine how well one will learn through observation. The past experiences and reinforcement that one has had through life "affect what features [one] extract[s] from observations and how [one] interpret[s] what they see and hear" (Bandura, 1977, p. 25). Bandura makes special note concerning modeling by the mass media which has only grown more salient, and advanced since Bandura wrote his 1977 book:

Some forms of modeling are so intrinsically rewarding that they hold the attention of people of all ages for extended periods. This is nowhere better illustrated than in televised modeling. The advent of television has greatly expanded the range of models available to children and adults alike. Unlike their predecessors, who were limited largely to familial and subcultural sources of modeling, people today can observe and learn diverse styles of conduct within the comfort of their homes through the abundant symbolic modeling provided by the mass media. Models presented in televised form are so effective in capturing attention that viewers learn much of what they see without requiring any special incentives to do so. (Bandura, Grusec, & Menlove, cited in Bandura, 1977, p. 25)

Once modeled behavior has been attended to, it must also be remembered, coded, and stored for use at a later time. This introduces retention processes into the cycle of observational learning. Retention processes involve symbolically coding the information received into memory for use when the model is no longer present (Bandura, 1977). "Through the medium of symbols, transitory modeling experiences can be maintained in permanent memory. It is the advanced capacity for symbolization that enables humans to learn much of their behavior by observation"
Symbolic coding is achieved through two main "representational systems," which are "imaginal and verbal." Behavior that is registered as imagery can be easily accessed through the mere suggestion of the behavior by anything associated with it. This system is highly governed by "sensory stimulation [which] activates sensations that give rise to perceptions of the external events" (Bandura, 1977, p. 25). Those behaviors that are repeatedly observed and correlated with "events that are physically absent" (1977, p. 25) usually prompt a visual image of the activity. Although visual imagery is of great importance, especially in the early years when language is just developing, verbal coding most likely accounts for the speed by which humans preserve information and learn through observation.

"Most of the cognitive processes that regulate behavior are primarily verbal rather than visual" (Bandura, 1977, p. 26). This is due to the fact that verbal codes contain substantial information in a form that is stored easily. Another important tool that is useful in retention is actual and symbolic rehearsal. Both types of rehearsal serve the purpose of dramatically increasing the likelihood that the modeled behavior will not be forgotten. Jeffery, (cited in Bandura, 1977), stated that the "highest level of observational learning is achieved by first organizing and rehearsing the modeled behavior symbolically and then enacting it overtly" (p. 27).

Motor reproduction processes are the third part of the modeling sequence. This is where symbols are transformed into actions. "For purposes of analysis, behavioral enactment can be separated into cognitive organization of responses, their initiation, monitoring, and refinement on the basis of informative feedback" (Bandura, 1977, p. 27). Those who possess all of the parts and skills necessary to perform the observed behavior will likely be able to synthesize them and closely approximate the modeled behavior.

Discrepancies between the symbolic representation and execution serve as cues for corrective action.... In most everyday learning, people usually achieve a close approximation of the new behavior by modeling, and they refine it through self-
corrective adjustments on the basis of informative feedback from performance and from focused demonstrations of segments that have been only partially learned. (Bandura, 1977, p. 28)

The final links in observational learning are motivational processes, which are exactly what the title alludes to. Motivation must exist for one to execute a learned behavior. There is a difference between "acquisition and performance because people do not enact everything they learn" (Bandura, 1977, p. 28). Processes which aid in motivation are valued outcomes, observed consequences, and self-reinforcement (incentives). People are more likely to establish a particular behavior as their own when it results in outcomes that they desire. Along the same line are the consequences that observers see models receive in response to their behavior. Behavior that elicits positive consequences will be more likely to be adopted by observers than those that have negative consequences. Lastly, the way in which one evaluates his/her own behavior will determine which behaviors are acted out and which are not. People will "express what they find self-satisfying and reject what they personally disapprove" (Hicks, cited in Bandura, 1977, p. 29).

Our society produces people who become role models for others. Role models for adolescents are likely to be family members, peers, media personalities, historically well known people, teachers, athletes, and others in the community (see Brown & Gilligan, 1992; Duck, 1990; Halprin, 1995; Hesse-Biber, 1996; Levine, Smolak, & Hayden, 1994). Sociocultural influences are important to consider since these influences can have a great impact on body image and role models: people make up the sociocultural structure. Social comparison theory suggests that people look to others to evaluate and understand themselves. Further, people do not compare themselves to just anyone. Instead they rely on a reference group or a particular set of people to use as a comparison (Goethals, 1986). Duck (1990) found that "[t]he primary reason girls gave for choosing their ideal was looks - she's pretty, beautiful, nice to look at, is thin, has a gorgeous body, has a good figure" (p. 25).
Despite the growth of the women’s movement and the ever-increasing emphasis on improving girls’ career aspirations and self-images, it seems that stereotyped sex differences still remain the choice of ideals. Girls still aspire to have good looks; a good figure; and be nice, kind, and caring. (Duck, 1990, p. 27)

It is hypothesized that role models available to girls today, however, not solely, can impact body image and may even have a role in the increased incidence of eating disorders over the past 30 years.

**Role Models and Body Image: Sociocultural Influences**

As part of membership in our society, young women have to learn how “to be a body.” And, for the most part, what a woman observes in the mirror is what she uses as a measure of her worth as a human being. Growing up in American society, we are taught, of course, to value what our society values. We learn to see ourselves as others see us, in terms of social standards. Women’s bodily focus arises from their discussions with their friends, their interactions with family and social groups, and the messages they receive from outside this intimate circle. It is reinforced by the everyday practices that make the body central to their identity as a female—from clothing, hairstyle, and makeup; to speech, walk, and gesture. (Hesse-Biber, 1996, pp. 58-59)

Sociocultural messages pressure women to strive to look like the female images presented in the media, which for most is impossible, while at the same time emphasizing the importance of independence, autonomy and intellect (Davis, Dionne, & Lazarus, 1996). Orenstein (1994) bluntly summarized these conflicting messages by stating that our society encourages girls to go forward from tradition to become a part of the world of men. Yet they are reminded...
continuously that ability alone is not all that is needed for success. They must also conform to that ideal which is driven by the media, there is never thin enough.

Negative body image has often been reduced to psychopathology, resonating within the individual person rather than something that external cultural forces also contribute to (Cash & Pruzinsky, 1990). Psychological, biological, cultural, socio-environmental, and behavioral forces most likely interact to increase concerns about weight and the development of eating disorders (Levine, Smolak, & Hayden, 1994). Taylor et al. (1998) found that "social (peer pressure), cultural (trying to look like girls / women on television or in magazines), biological (Body Mass Index [BMI]) and, in the older sample, personal (self-confidence) processes" (p. 39) were factors that had an impact on the perpetuation of excessive concerns about weight.

Much of the research suggests that sociocultural factors, such as "the thin ideal body image espoused for women, the centrality of appearance in the female gender role, and the importance of appearance for women's social success" (Striegel-Moore, Silberstein, & Rodin, cited in Stice et al., 1994, p. 836), exposure to media, awareness of and internalization of sociocultural messages on appearance (Cusumano & Thompson, 1997), family and peers, and how these interact are the most influential aspects of body image satisfaction or dissatisfaction (Garfinkel & Garner, 1982; Heinberg, Thompson, & Stormer, 1995; Johnson & Connors, 1987; Levine, Smolak, & Hayden, 1994; Stormer & Thompson, 1996). Mautner, Owen, and Furnham (2000) replicated the Stormer and Thompson (1996) study and found that, "[i]n general, the internalization of societal appearance ideals was the most important contributor to BID [body image dissatisfaction]" (p. 169). Taylor et al. (1998) noted that having self-confidence and extensive levels of social support can help to protect otherwise at-risk girls.

Levine, Smolak, and Hayden (1994), in their vulnerability-stressor model, proposed that during childhood some girls develop a "superordinate cognitive structure that organizes thoughts, memories, and feelings around fear of fat and the importance of slenderness" to develop what is
termed a "thinness schema" (p. 486). When early adolescence arrives, this thinness schema is already in place and these girls "interpret the psychobiological changes of pubertal development and the emergence of dating in ways that highlight the threat of normal fat deposition and the importance of slenderness for attractiveness" (Levine, Smolak, & Hayden, 1994, p. 486). This interpretation of normal changes and resulting behaviors is supported and reinforced by media, family, and significant others. Although sociocultural influences may appear to be influencing the early adolescent, it may be that the adolescent is selectively seeking out parts of the social environment that agree with her already formed beliefs about the importance of a slim body. Such beliefs likely began in childhood and have continually been confirmed and reinforced by family, peers, and media (Levine, Smolak, & Hayden, 1994).

Hesse-Biber (1996) compared weight charts used by the medical profession, the Metropolitan Life Insurance chart, to those from the diet industry for both men and women. She termed the medical chart the "medical" model and the diet center chart the "cultural" model. She found that for men the average difference for height and weight between the two charts was approximately 5 pounds. However, the average difference between the two charts for women, when comparing the height and weight on one chart to the same height and weight on the other chart, was 20 pounds. From a sample of college students, Hesse-Biber illustrated how women tend to gravitate or desire to move more toward the cultural model of weight than to the medical model. For men, the digression between actual and preferred average difference between desired and actual mean weight was 1 pound, while for women there was a 10 pound difference.

Most women accept society's standards of beauty as "the way things are," even though these standards may undermine self-image, self-esteem, or physical well-being. Weight concerns or even obsessions are so common among women and girls that they escape notice. Dieting is not considered abnormal behavior, even among women who are not overweight. But only a thin line separates
“normal” dieting from an eating disorder. (Hesse-Biber, 1996, p. 14)

“The link between the cultural norms of thinness and the individual is mediated by the family, school, and peer group. They translate and embellish society’s messages” (Hesse-Biber, 1996, p. 94). These people act as role models for girls, people that girls want to be like, be inspired by, be accepted by. Findings by Akan and Grilo (1995) implied that cultural factors do influence weight, body satisfaction, and eating attitudes and behaviors. In their study, African Americans had a higher BMI than Caucasian or Asian American women, but Caucasian women experienced greater body dissatisfaction, dieting, and eating disordered behaviors and attitudes than both African Americans and Asian Americans, who were similar. In all racial groups, self-esteem and a highly external locus of control, “public self-consciousness,” were psychological variables that were correlated with disordered eating attitudes and behaviors, and body dissatisfaction.

In a cross-cultural study, Ferron (1997) compared French and American adolescents’ attitudes, beliefs, opinions, and feelings concerning body image and how it evolves. The primary difference between the two cultures pivoted around the belief that adolescents from these cultures have concerning their ability to achieve the ideal body. Seventy-five percent of American adolescents believed that the ideal body could be achieved through such individual personality traits as “willpower, courage, self-confidence, and adherence to specific rules” (p. 740), and that predisposition to a certain body did not exist. Although French adolescents perceived an ideal body, 75% believed that their bodies were genetically predetermined and that personal characteristics such as those listed above for the American adolescents were not sufficient to change this fact. They did not see the ideal as possible to actually achieve. “Thus, [for the French] only glaring signs of physical carelessness are considered blameworthy” (1997, p. 740).

Ferron (1997) also found that among American adolescents, 80% of boys and 90% of girls believe that certain diets and exercise regimens can effectively help one achieve the ideal.
Only 50% of the French adolescents expressed this belief. Seventy-five percent of the American adolescents reported spending time daily on appearance through the practice of such habits as the application of makeup and skin care products, shaving, and hair-styling, compared to only 25% of French boys and 50% of French girls. "In most cases, the French adolescents' perception implies an affirmation of their individuality through acceptance of their own physical appearance as well as that of others" (1997, p. 740).

Around 75% of the adolescents from the sample of Americans felt that with the "right" or "perfect" body they would be happier, more popular, successful, loved, accepted, and admired, compared to less than 25% of the French sample. Seventy-five percent of girls from the American sample "strongly believe that their personal worth is assessed by the way they look. As a result, they admit that they would do almost anything to attain what they consider the ideal of physical perfection" (Ferron, 1997, p. 741). Also noted was the prevalence of American adolescents who expressed experiencing painful feelings due to the inability to be loved and accepted on the basis of physical appearance. Revealing rejection from peers based upon failing to fit in physically was expressed by 2 out of every 10 U.S. adolescents compared to 1 in 10 French adolescents. U.S. adolescents in the sample reported their parents as sharing this view as well. American adolescents tended to believe that their parents "consider their children's physical appearance as likely to be or become one of their essential social assets. Moreover, these adolescents describe their parents as favorable to their attempts to test their attractiveness, notably by dating" (1997, pp. 740-741).

Moving into a culture populated by images and models of young women, girls incorporate these images from reading magazines and books, from watching TV, and from listening in on the ways that other people, especially parents and teachers, look at and speak about them, their classmates, their acquaintances, their friends. (Brown & Gilligan, 1992, p. 175)
Role Modeling Through the Media and Body Image

The impact of the media on our imaginations is undeniably enormous. We are accustomed to seeing still, posed faces, even in the movies.... Women's beauty in the media has two major and sometimes competing elements, the face and the figure, by which I mean the image of the face and the image of the body, frozen representations of a manipulated moment, seen from a particular angle, under a particular light. Women suffer extraordinary regimes of diet and exercise in order to look like the lean models in magazines and movies; women spend great sums of money on cosmetics and treatments to emulate the flawless faces on magazine covers and movie posters.... Their look is only partially their own, shaped as it is by all the other looks they have pored over and which they emulate. (Halprin, 1995, pp. 256-258)

Media influences and the role models provided through the media play a large role in the development of body image because media portray cultural ideals to audiences of all ages. Television and other media sources have the ability to portray ideas, behaviors, attitudes and images to such a large portion of society, that these messages can easily and quickly become collective beliefs or norms of the majority of a population. Bandura (1977), in discussing the transmission of information to observers, discussed the power of visual media in transmitting information which has been shown to greatly influence the development of new perspectives, feelings, and the acquisition of new ways of behaving.

The mass media play an influential role in shaping behavior and social attitudes... in observational learning a single model can transmit new behavior patterns simultaneously to vast numbers of people in widely dispersed locations.... The more peoples' images of reality derive from the media's symbolic environment,
the greater is its social impact.... Children - or adults for that matter - rarely have to be compelled to watch television, whereas oral or written reports of the same activities would not hold their attention for long. (Bandura, 1977, pp. 39-40)

Various types of media are important in the lives of young adolescents and they use it virtually every day. Media is one way to find answers to questions concerning solutions to problems. It can help direct adolescents about ways in which they should behave, how to look, how to act with the opposite sex, and what to wear (Signorelli, 1997). Miller and Reeves (1976) found that children selected characters on television as people that they would like to grow up to be like. Reeves and Miller (1978) also found a strong inclination for children, but most notably boys, to identify with same-sex characters. Boys' identification with male characters was correlated positively with stereotyped, masculine attitudes such as action and strength. Female identification with characters was related to perceptions of physical beauty. Also, girls selected males as those they identified with more often than boys selected females.

Duck (1990) interviewed 313 children in Grades 5 to 9 about the person they would most like to be. Fifty to 75% of the choices were various types of media figures, not people known personally to the sample of children. Girls mentioned more personally known people than did boys, although TV characters and models were chosen most often by older girls and pop stars for younger girls. Children were also asked to identify people that they would least like to be like. Interestingly, 50-66% of negative choices included people known personally to the child. Caughey (cited in Duck, 1990) suggested that people may choose those they have not met over those they have due to the large numbers of people on television but also because people in the media appear to be better than the people that surround them. That is, people look to those who are recognized in the media as elite persons with great status and prestige.

Martin and Kennedy (1993) found that girls in Grades 8 through 10 were more likely to compare themselves to models in advertising than were girls in fourth grade. Harrison (1997)
cited a study by Reeves and Greenberg (1977) where a positive correlation was found between how attracted a child was to a television character and the likelihood of the child modeling behaviors exhibited by those characters. Harrison hypothesized that media figures who are thin, attractive, and capable have prominent "modeling potential" which likely motivate young females to adopt behaviors which render them more like these media figures. Harrison found that interpersonal attraction to thin/provocative media figures positively predicted symptomatology for eating disorders, drive for thinness, perfectionism, ineffectiveness, bulimia, and anorexia, but not body dissatisfaction. These same results were found even when media exposure was controlled. This study demonstrated that interpersonal attraction to thin media ideals can act as a moderator which further aids the influence of media exposure upon disordered eating. Attraction toward average and heavy media figures did not positively predict any of the above seven eating disorder indices. It was hypothesized that perhaps liking, wanting to be like and feeling similar to a media figure may indicate body satisfaction. It is most likely that when one likes, wants to be like, and feels dissimilar on the personal attribute of physical attractiveness in a media figure, that body dissatisfaction emerges.

Indeed, social learning theory maintains that the more attracted an observer is to the model, the more motivated the observer will be to emulate the model. However, also inherent in social learning theory is that perceived similarity to a model motivates an observer to model a social agent (Bandura, 1977). "Thus, the process by which the media may impact disordered eating is not one of mere exposure to depictions of thin people, but one of exposure plus perceptions of these people in relation to the self" (Harrison, 1997, p. 496). The direction of correlation between interpersonal attraction to (thin) media figures and eating disorders / eating disorder symptomatology is not known, although the relationship may be cyclical. Garner and Garfinkel (1980) noted that "although it may appear superficial to ascribe to cultural ideals a role in
the development of anorexia nervosa, the potential impact of the media in establishing
identificatory role models cannot be overemphasized" (p. 652).

According to Kilbourne (1994), the models seen today are 23% below what the average
weight is, and 20 years ago they were 8% below. She described the ideal female body type as
having long legs, broad shoulders, being very tall and "genetically" thin. Kilbourne stated that only
5% of women have this ideal body type that is presented so prolifically, and therefore 95% of
women are excluded from being able to meet the ideal criteria. "The ideal body type today is
unattainable by most women, even if they starve themselves" (Kilbourne, 1994, p. 396). These
ideal images of women, which are so prevalently presented in the media, consist, on average, of
models who are 5'10" with a weight of 110 pounds. A mere 30 pounds less than the average
American adolescent female. Also, the appearance of the model is one which is somewhat
uncommon yet because the image of these women or girls is so ubiquitous it is hard for many
girls to see themselves as "right" with such a dominating comparison lingering around them
(Hesse-Biber, 1996).

In a study done by Levine, Smolak, and Hayden (1994), sixty percent of Caucasian
middle school girls ages 10-14 reported that they read at least one fashion magazine on a regular
basis and that these magazines were deemed as important sources of advice for beauty, fitness,
diet, and body shape concerns. The researchers found the amount of importance girls ages
10-14 place on fashion magazines as a key source of information about fashion, beauty, body
size, and how to achieve the "right" look, to be a potent socializer toward the investment of the
thin, ideal body, weight management, and disturbed eating behavior. However, the direction of
causality could not be determined in this cross-sectional study. It could be that girls who are
driven toward the thin ideal seek further reinforcement and information from these magazines or
perhaps these magazines encourage body dissatisfaction by their emphasis on physical
attractiveness to young, curious girls seeking direction. It could be that both conditions are
applicable. Richins (1991) found that among her sample of college women, 50% of the subjects responded that "about half the time" or more frequently, they compare themselves to the images of women depicted in ads. About 30% of the respondents reported a feeling of dissatisfaction toward the way they look when viewing advertisements. In focus group discussions, Richins found that comparison to the images in ads occurs frequently among college-age females and that these comparisons are important. Richins reported that this is a leisure activity in which virtually all of the women reported frequent participation...

The initial general reaction, which was spontaneously mentioned by nearly all the participants, was that they envied the models because of their beauty...[and] women who were particularly dissatisfied with one of their body parts (and nearly all were) said that they focus on that part of the model's body, generally looking for reassurances that their own body part is not "that bad." (1991, p. 75)

Haag (1999), with the American Association of University Women, conducted a qualitative, interpretive study with 2,100 girls ages 11-17 across the nation. Girls answered six questions on an application form used to attend a special summit at more than 50 locations called the Sister-to-Sister summit.

The vehicles that transmit society's image of girlhood, say summit respondents, are "teen magazines, like Teen or YM," "abusive pop music," "TV, which sends messages that glamorize violence and sex," "television and media body images" and, in general, "media depictions of teenagers." Girls who say they experience "pressure from the media" often explain that the bodies it displays are "too perfect." (p. 11)

Signorelli (1997) conducted a content analysis of media used most frequently by girls. These media included television programs, commercials, movies, music videos, magazine articles and magazine advertisements. The overall results suggest that there are many positive role
models available for girls in the media who promote independence, solving one's own problems, using intelligence, honesty, efficiency, and self-reliance. On the other side, however, these same media present stereotyped messages concerning appearance, relationships, and careers.

Media's portrayals contribute to girls' perceptions, helping them define what it means to be a girl and later a woman. Adolescent girls form ideas about their own lives by observing how girls and women in the media look and behave, their motivations and their goals, what they do with their lives. This power to influence children also gives media the potential to inspire them. Media can offer girls strong female role models whose behavior, attitudes and goals broaden their concepts of future possibilities. Alternatively, media can reinforce female stereotypes, limiting girls' perceptions about what they should look like, what they should care about, and who they should strive to become. (Signorelli, 1997, online)

Signorelli (1997) also pointed out that pre-teens and young teens are now a specially targeted group with advertisements, magazines, music videos, movies, and television programming directed especially at them. "There are profits to be made from convincing certain vulnerable groups, like young people, that they need to purchase goods and services to feel good about their bodies" (Hesse-Biber, 1996, p. 97). Hesse-Biber noted that the media industry is well aware of the "increased purchasing power" (p. 97) that the young have in our world today. She also stated that a great many of the products aimed at these youth are focused on the encouragement of body anxiety. Attie and Brooks-Gunn (cited in Hesse-Biber, 1996) stated that adolescents are seeking out media to use as "guidelines about how to behave, young adolescents may be particularly susceptible to popular media stereotypes, especially those values and ideas presented by entertainment and fashion industries as vital elements of 'youth culture'" (p. 233).

The problem is not that young girls seek to find advice and so forth through various media sources but that the media censors the truth. "Women's culture is an adulterated, inhibited
medium. How do the values of the West, which hates censorship and believes in a free exchange of ideas, fit in here?" (Wolf, 1991, p. 83).

Schlenker, Caron, and Halteman (1998) conducted a content analysis of Seventeen magazine in the years of 1945, 1955, 1965, 1975, 1985, and 1995. They were looking for evidence of inclusion of more feminist versus traditional messages in the years when the women's movement has been the strongest (1945, 1975, and 1995). The authors concluded that indeed advances have been made in the past 50 years, with greater diversity of choices in all aspects of life available to women, yet they question the response to this by the mass media and society. Although Seventeen magazine did increase feminist message content significantly during the periods of time when the women's movement was the strongest, still more than half the content in magazines for every year except 1945, where feminist messages took up 52% of the magazine content, continued to focus on traditional messages. The most prominent traditional message, that is, the message with the greatest number of pages devoted to it, was appearance.

Silverstein, Perdue, Peterson, and Kelly (1986) in their analysis of characters on television and in the movies, models in magazines, and types of advertisements found in magazines, found a host of interesting facts which implicate the media as an extensive promoter of an "ideal" standard of attractiveness for women, not only now but in the past as well. Findings regarding television characters revealed that 69.1% of female characters were thin compared to only 17.5% of males. Also, 5% of females were rated as heavy, compared to 25.5% of males. When age of characters was studied, 35% of female characters were rated as 26 years old or younger, while only 16% of males received this same rating. Twenty-two percent of women and 50% of men were rated as being older than 35. When age was looked at as a possibility for the differences in heavy versus thin character ratings, results showed that 65% of women 26 to 35 years old were rated as thin, compared to 26% of males. Fifty-four percent of women in the age group of 36 to 50 were rated as thin compared to 13% of males.
Silverstein, Perdue, et al. (1986) also looked at specific types of advertisements appearing in magazines targeted at women versus those targeted to men. The number of diet ads for women in 48 issues was 63, while for men it was 1. Concerning articles on body shape and size and advertisements promoting ways to enhance one's figure through nonfood products, the number in women's magazines totaled 96 and in men's, 8. Interestingly in these same magazines women receive an extraordinary amount of information and advertising concerning food. For food ads with "Meat, Fish and Poultry," women's 73, men's 3; "Starches," 153:1; "Sweets and Snacks," and "Fats and Oils," 150:0. Total food ads ratio was 1179:10 and the ratio for cooking, food and dining articles was 228:10.

In an analysis of bust-to-waist ratios in Vogue and Ladies Home Journal from 1901 to 1981, Silverstein, Peterson, and Perdue (1986) found that the ratios in both of the magazines had dropped to 60% of the 1901 level in 1925. In the late 1940s the ratio in both magazines went back up, but not even close to the ratio at the beginning of the century. By 1949 the ratio again began to decrease and by the late 1960s / 1970s, had reached the same level as that found in the 1920s and has remained low. No other period in this century has seen such a small ratio for such an extended period of time. Women born in the 1960s and 1970s have been exposed to this standard of attractiveness their entire lives. "This provides some support for the notion that the current standard of bodily attractiveness for women portrayed in magazines may have played a role in producing the recent outbreak of eating disorders among women" (pp. 528-529). Similar results were found in evaluating the bust-to-waist ratios of actresses in movies between the years of 1940 and 1979.

Silverstein, Peterson, and Perdue (1986) found that as women in the 1920s and late 1960s became more established in managerial and other professional positions, the images of ideal women, in such magazines as Ladies Home Journal and Vogue, correspondingly became thinner and thinner. The authors note that the mid-1920s is the only other time in history when
models appearing in the media were as noncurvaceous as they are at the present time. During that time period, like today, eating disorders were epidemic among young females. Barber (1998), similarly found that curvaceousness of women decreased as economic growth increased and as more women were educated and entering the work force.

Garner, Garfinkel, Schwartz, and Thompson (1980) collected data on Playboy centerfolds and Miss America pageant contestant winners from 1959-1978. They found, through the years, a clear trend toward increasingly thinner centerfolds and pageant winners existed. Also noteworthy was the finding that pageant winners during the 1968-1978 years were even thinner than the average contestant in the same pageant. In evaluating articles in six popular women's magazines, the authors found that articles focused on dieting during this same time period increased significantly. They made special note that these changes evidenced in the media were conversely met by increasing weight through the same period of time in the general population of young women. They expressed concern that this pairing of declining body weight in the media with the increasing weight of women in the general population may have the ability to wield profound pressure on some females to restrain from eating in order to meet the ideal, despite the great possibility of both negative emotional and physical outcomes. "Thus while the magazine centerfolds, Pageant participants, and presumably the prevailing female role models have been getting thinner, the average women of a similar age have become heavier... It is ironic that the current symbols of 'sexual attractiveness' may be gravitating toward a weight which is in biological opposition to normal reproductive activity" (Garner et al., 1980, p. 490).

To update this study, Wiseman, Gray, Mosimann, and Ahrens (1992) reviewed data available on Miss America winners and Playboy centerfolds for the years of 1979-1988. They found that the cultural ideal had indeed gravitated toward a thin ideal and instead of reversing itself this trend showed evidence of a continual body size decrease or body size had reached low levels and had plateaued, but not reversed. At the time of this study Miss America contestants
were continuing to see a decrease in body size while Playboy centerfolds appeared to have reached an all-time low and had plateaued. This study supports the study done by Garner et al. (1980) and indicates "that this index of women's 'ideal' body image has generally stabilized at 13-19% below expected weight" (Wiseman et al., 1992, p. 89). A possible and likely reason for this leveling off may be explained by the fact that further decrease in weight beyond that which we have already seen would be almost impossible to achieve and dangerous to one's health. As it is, the DSM-III-R (American Psychiatric Association, 1994) lists body weight at 15% or more below the expected weight for a person's age, height and frame as a primary characteristic of an eating disorder. "Thus a majority of these 'ideals' of our society may be classified as having one of the major symptoms of an eating disorder. The statement this makes about our society is significant, namely, that we desire the body size of a person who is extremely thin" (1992, p. 89).

Myers and Biocca (1992) found, in analyzing 4,295 television commercials, that attractiveness-based messages were involved in one out of every 3.8 commercials. The majority of women in these commercials were unrealistically thin and beautiful. They also found, in testing their hypothesis of an "elastic body image," that after immediately viewing only 30 minutes of television advertising or programming, women perceived their body image differently than they had before viewing the televised content. Interestingly, though, they found decreased depression and more positive affect following the viewing of ideal images. They proposed that this may be due to subjects entertaining the idea of their own ability to achieve the ideal. Henderson-King and Henderson-King (1997) suggested through their findings that these thoughts of attaining the "ideal" are more easily employed by those who come at all close to approximating the ideal. Subjects exposed to ideal images, who were further away from being similar to these ideals, expressed lower levels of body esteem than those who were closer in similarity to the ideal images. They also found that both social and individual factors act to moderate the correlation between body esteem and exposure to media.
Heinberg and Thompson (1995) found that females who watched a 10-minute tape of commercials that emphasized appearance were more dissatisfied with the shape of their body than were the females who viewed the tape of non-appearance commercials. They also found that those females who scored high on the Sociocultural Awareness Toward Appearance Questionnaire (SATAQ), which looks at awareness and internalization of sociocultural attitudes toward appearance, responded most negatively to the appearance-based commercials. Turner, Hamilton, Jacobs, Angood, and Dwyer (1997) found that college women in their sample who viewed fashion magazines for 13 minutes had higher levels of body dissatisfaction, were more frustrated with their weight, desired a lower weight, showed a preoccupation with wanting to be thin, and had a greater fear of fat than women who viewed news magazines. Posavac, Posavac, and Posavac (1998) found, through three experiments, that the ideal images of women in the media have the potential to raise weight concerns in most young women through exposure, although not all women were susceptible. Women with initial, low trait body dissatisfaction were least likely to be responsive to exposure to ideal media images. These findings were replicated and the replication experiment also suggested that women exposed to pictures of realistically attractive women responded with less adverse reactions than they did to the "perfected media standard."

Cash, Cash, and Butters (1983) similarly found that the rating of one's appearance drops after viewing very attractive models in the media (see also Richins, 1991). Tiggemann and Pickering (1996) in their sample of 11th-grade girls, with an average age of 15.5, found that the amount of time spent watching television did not significantly predict body dissatisfaction, drive for thinness, weight variables (BMI), or perceived weight. When amount of time spent with television was broken down into program types, statistically significant correlations appeared, especially in predicting body dissatisfaction. Soap operas, serials, and movies - programs which portray females in roles which are stereotyped - were positively related to body dissatisfaction and
watching sports was negatively correlated with body dissatisfaction. Amount of time spent watching music videos was positively correlated with drive for thinness. Drive for thinness is the Eating Disorder Inventories (EDI) principal gauge of anorexia nervosa. “Perhaps music videos provide the opportunity for explicit comparison with others...[while] [t]he images of women portrayed in serials and movies are implicit, in that the women also have other roles” (p. 202).

Music videos may push images of women which purposefully only provide models of intense stereotyped female attractiveness as well as behavior that many young women then emulate. The girls in this sample reported watching 20 to 25 or more hours of television for one week, an average of 3.2 hours of television per day, during the school term. “It is difficult to believe that a medium which gets so much exposure will not have an influence on the minds of young women” (Tiggemann & Pickering, 1996, p. 202). Interestingly, Kenrick and Gutierrez (1980) and Richins (1991) found that viewers’ ratings of the appearance of other people declined as well. Irving (1990) found that bulimic subjects who viewed slides portraying thin models presented with self-evaluations that were lower than those subjects who viewed models who were both average and oversize. All of the subjects in this study felt that the greatest pressure to be thin emanated from the media first, followed by peers and then family.

In a study done by Stice et al. (1994), subjects were exposed to the ideal images presented in the media and their reactions to these images were studied. They found that after viewing these pictures, subjects presented with depression, guilt, body dissatisfaction, shame, insecurity, and stress. They also found media exposure and symptoms of eating disorders to be directly related (Stice et al., 1994). A recent study by Pinhas, Toner, Ali, Garfinkel, and Stuckless (1999), using a nonclinical sample, found that female university students in the experimental group “feel angrier and have a greater depressed mood after looking at images of the thin ideal. This change was observed following only 20 such images” (p. 225).
Lucas, Beard, O'Fallon, and Kurland (1991), in studying the rate of occurrence of anorexia nervosa over the past 50 years, found that the frequency of the disorder in girls in the age range of 10-19 went right along with the changes in fashion and the presented image of the ideal body. The periods of time with the highest incidences of anorexia nervosa were just preceded by the presentation of the thin ideal. Richins (1991) noted that the time interval of lowered dissatisfaction which results in response to exposure to advertising needs to be further examined.

Given the pervasiveness of idealized images in society, one has to assume that the effect is temporary; otherwise, repeated exposures to such images over the course of even one day might drive the ordinary consumer to despair. On the other hand, because idealized images are so pervasive, it is somewhat surprising that exposure to a few ads produces an effect on satisfaction at all. (Richins, 1991, p. 82).

Although the effects of advertising on feelings toward the self may be temporary, and have no long-term effects upon consumers, it is equally likely that this same exposure can have cumulative consequences on self-feelings, for at least some groups of consumers (Richins, 1991). Pollay (cited in Richins, 1991) noted the well-known difficulty of assessing the cumulative effects of social circumstances as prevalent as advertising.

Posavac et al. (1998) wrote of their disturbance by findings in their study of increased weight concerns among college women who were subjected to the "superimages" found in the media.

The present findings are particularly disturbing in light of the relative weakness of the experimental manipulation compared to real life experience. In our studies most participants who viewed ten images of fashion models for a brief interval reported increased weight concern. Since this manipulation was sufficient to produce
an adverse effect on weight concern, it stands to reason that a lifetime of exposure to media images may produce much more severe consequences. (p. 199)

Jhally (1994), in a video presentation focused on music videos and negative stereotyping, critiqued the music video world as one which exists to appeal to adolescent male sexual fantasies. Women, no matter their race or ethnicity, are reduced to body parts. The physical appearance of the majority of women portrayed in this world are almost uniformly similar in their physical appearance. That is, they are thin, yet curvaceous in the “right” places— statuesque, and beautiful. The behaviors they primarily are shown to engage in are also severely stereotyped. Jhally argued that these images of women serve to foster self-loathing and body dissatisfaction among females. He also noted that male perceptions of women are affected by such presentations of women, and these images of women may promote such behaviors as sexual harassment, physical abuse, and rape.

Signorelli, McLeod, and Healy (1994) in a content analysis of MTV commercials found support for each of their five hypotheses. In the sample of MTV commercials, males appeared somewhat more than females (p < .05) and the bodies of women were presented as more beautiful and fit than the bodies of men (p < .001). Seventy-five percent of the ratings of male bodies were average, and about 77% of women’s bodies were rated as beautiful or in shape. Ratings on female attractiveness were greater for women than men (p < .001) with more than 50% of males rating in the average or middle category and more than 30% rating in the attractive category. Few males were rated as remarkably attractive (2.2%). More than 50% of females however were rated as extremely attractive or beautiful, about 25% as attractive, 15.1% neutral and 8% unattractive. Females were more apt to be wearing sexy or skimpy clothing than males (p < .001). Ratings for males included 93.5% neutral and 6.5% somewhat sexy clothing. Female ratings were 46.2% neutral, 24.4% sexy, and 29.4% very sexy clothing. Lastly, likelihood of being the object of another’s gaze was found more often for women than men (p < .001). Nineteen
percent of males were objects of the gaze of another, compared to about 60% of females. "When one character directed his or her gaze upon another character the object of the gaze was a female in almost three quarters of the time" (p. 97).

Even though it is true that poor body image and eating disorders are not caused solely by visual images, they do flourish in a climate where such a high proportion of "normal" people labor away and spend so much money in the quest for the consummate body (Brumberg, 1997). Fredrickson, Roberts, Noll, Quinn, and Twenge (1998) stated that the media certainly "fans the flames, severely aggravating the damage done" (p. 281), but does not see the media as the foundation of the problem. Silverstein, Perdue, et al. (1986) contend that the media is not the only place where the female ideal is promoted; it may not be the place where it originated, but it is most likely the most influential promoter of the ideal woman due to the popularity of such media as, television, movies, and magazines. "[G]iven the prevalence of eating disorders and their partial syndromes in western cultures, it becomes a public health and preventative health issue to start to provide women with female images in a range of sizes in a variety of situations" (Pinhas et al., 1999, p. 226).

Finally, adolescent girls attending a Sister to Sister Summit put on by the AAUW composed some messages and possible solutions to impact awareness and change in regard to body image and the media. Here are some of the messages:

Recognize our challenges--females are second class citizens; we are stereotypes; the media uses us [to sell and consume].... The expectations of media, parents, and peers are powerful. Media is shaping our lives, and we don't like it....

Question standards set by Barbie and TV (breast implants and reductions; brand names).... Peer discussions of consumerism - Commercials v. Reality.... Media to
show real bodies, not made-up thin ones.... Tell them you want to see models of normal sizes, shapes, and looks.... The media presents unrealistic, glamorized images of women’s bodies that pressure young women to fit that description. IF they fail to meet the media image (fashion magazines, TV, music groups) they feel worthless and depressed and feel the need to starve and do other inhumane things to their bodies. The media should be encouraged to provide more realistic images.... Media--show us ‘real’ healthy girls.... Girls--stop spending money on negative messages/images.... Form boycott and letter-writing campaigns to address unrealistic and/or exploitive portrayals of women and girls in media/advertising.

(from Haag, 1999, pp. 13-14)

Role Modeling by Family and Peers and Body Image

“According to social learning theory, family members and peers can intensify the sociocultural emphasis on slenderness for girls that is pervasive in our society” (Byely, Archibald, Graber, & Brooks-Gunn, 2000, p. 155). Family members can influence body image through direct verbal comments highlighting the importance of having and maintaining a slender figure, through rewards for lost weight, and teasing or shaming (Levine, Smolak, & Hayden, 1994). Hesse-Biber (1996) stated that “the family is a child’s first interpreter of the larger world. Some families repeat the cultural values of thinness, others modify the message” (p. 84). Hesse-Biber interviewed college women, some of whom reported to have families where body image issues were avoided, who quickly pointed out the small ways, within the family, in which the cultural message was passed on to them. She noted that “mothers are crucial brokers of the wider cultural norms” (Hesse-Biber, 1996, p. 87). Pipher (1994) wrote that “mothers are expected to protect their daughters from the culture even as they help them fit into it.... They want their daughters to be
relaxed about their appearance, but know that girls suffer socially if they aren’t attractive” (pp. 103-105).

Paxton et al. (1991) also discussed the role of the family in influencing body image. He stated that parents, especially mothers, can also serve as models who support the slender ideal. In his research, he found that high school girls who had a dieting parent were more likely to be dieting themselves. “Having a mother who is obsessed with being thin and who diets regularly is considered one of the risk factors for the development of an eating problem in an adolescent girl” (Hesse-Biber, 1996, p. 87). Pike and Rodin (1991) found that the mothers of girls who were eating disordered were more likely to be eating disordered themselves and had different dieting histories than those mothers of non-eating disordered girls. Also, mothers of eating disordered girls thought that their daughters should lose more weight than the mothers of non-eating disordered girls. Mothers of eating disordered girls also thought of their daughters as less attractive than the girls believed themselves to be. Girls and mothers in the eating disordered group perceived their family functioning to be less satisfactory than the non-eating disordered group, with girls wishing for greater family cohesiveness.

Schrieber, Robins, Striegel-Moore, Obarzanek, and Wright (1996) found that mothers who reportedly told their daughters that they were too fat was a significant predictor of persistent dieting in girls 9 and 10 years of age. Hill and Pallin (1998) found that along with negative, global self-worth and BMI, the frequency with which a mother dieted were significant predictors of dieting awareness in 8-year-old girls. “This study supports the view that young girls are drawn to weight control to improve their self-worth, and that mothers are influential in this regard” (1998, p. 405). Thelen and Cormier (1995) reported that body weight, desire to be thinner, and dieting were positively related to the reported encouragement of both mothers and fathers concerning weight control in fourth grade girls. However, when body weight was controlled for, only the correlation between fathers encouragement of weight control and dieting in daughters remained significant.
A woman's body, then, becomes for her an instrument, a commodity that she can and must use in our world in the pursuit of her personal attempt to find contentment and a place. And, a woman's body, we learn, is not a very good or safe environment to live inside. Rarely are our mothers and other female adults able to convey to a young woman that her body, whatever natural shape it has, is a source of pride and of beauty, since they themselves have not been able to feel that. We learn instead that our bodies are powerful in a negative sense, they can destabilize men and get us into trouble. It is no wonder then that we become frightened of our bodies and see them not as where we live but as a part of us that we must control, watch and direct. (Orbach, 1982, p. 24)

Hesse-Biber (1996) found in her study that most fathers were reported to be quiescent in regard to their daughters body, although there were some extremes. Silence, however, does not mean that messages are not being sent. Once again it seems that the mother is taking the brunt of the blame when men clearly show their preferences or their socialization to the preference of the “right” female look through their conscious or unconscious language, actions, and romantic choices. We need to consider why it is that mothers / adult women are so concerned with dieting. It could be argued that fathers do play as large a role as the mother. Fathers / men perceive the importance of physical attractiveness in women almost as clearly as women do in our society and many clearly support these standards for women.

Fathers should be seen as just as likely to act as a transmitter of this societal message as mothers. It is both, some mothers and some fathers, who support this societal value without question, many times unassuminngly or unconsciously, while it is likely that women more often model the actual behaviors of trying to achieve the “right” body. “It is often assumed by researchers that fathers do not influence daughters’ body image and weight control behaviors because males in general tend to be less concerned with their own body weight” (Rozin & Fallon,
cited in Thelen & Cormier, 1995, p. 86). Hill and Pallin (1998) noted that there is little research available on the influence of fathers and other family members (aside from the mother) and their role in dieting awareness.

Smolak, Levine, and Schermer (1999) found that comments from parents to their fourth-through fifth-grade child concerning their child’s weight appeared to be a more powerful contributor to their child’s beliefs and behaviors concerning weight than actual modeling by the parents, especially the mother. However, modeling was still found to be a significant contributor and girls tended to be affected to a greater extent by both modeling and direct verbal comments than boys. In a study by Schur, Sanders, and Steiner (2000), the majority of children in Grades 3 through 6 (77%) reported that the principal source of information concerning dieting came from the family, of which a parent was usually cited, followed by the media (55%) and peers (26%).

Peers appear to be most likely to contribute to the slender ideal by talking about the importance of being thin which may contribute to attitudes and behaviors about body shape, weight loss and eating which are unhealthy (Nichter & Vuckovic, in press). Taylor et al. (1998) found that peer emphasis on weight and eating in elementary school and middle school girls was the most strongly related domain to weight concerns. In the elementary sample, peers were followed by “trying to look like girls / women on TV or in magazines” and BMI. For middle school girls, peers were followed by self-confidence, BMI, trying to achieve the look presented by the media and, teasing about weight.

Cash and Pruzinsky (1990), in discussing different body types (endomorph, mesomorph, and ectomorph) summarized research by Lerner and Gellert and Lerner and Schroeder concerning social appraisals of children and adolescents by their peers in relation to body type. These researchers found that beginning in kindergarten those children who were chubby or thin received more negative nominations and less positive peer nominations than those children who were seen as having a "normal" or "average" build. They also found that beginning in middle
childhood and persisting through early adolescence, varying amounts of personal space or interpersonal distance are given to male and female peers based upon body type. Cash, Winstead, and Janda (cited in Cash and Pruzinsky, 1990) reported U.S. survey data which asserted that adolescents have a more pessimistic body image and put more emphasis upon physical appearance than those in older groups do.

In an interview study by Wertheim, Paxton, Schutz, and Muir (1997), girls reported that the ideals presented by the media stir up an immense pressure to meet the ideal. Yet, sociocultural factors such as family and peers were seen as reinforcing those values in the media. Teasing, desire to fit in, dieting because friends diet, concerns expressed by friends about themselves and their weight, and pleasing others were some of the social factors that girls reported as reasons for dieting. Social comparison as evidenced by friends stating such things as “I am too fat” or “I started a diet” was an important theme among this sample of girls.

Those expressing dissatisfaction seemed to be unaware of the effect it had on others. Even though girls felt they could talk openly with friends about body issues, and many discouraged others’ dieting, “I’m fat” talk and mind-reading others’ negative appraisals fueled their weight concerns and dieting. (Wertheim et al., 1997, p. 352)

In conclusion, Brumberg wrote:

As a society, we edged down the road of sexual liberalism without giving much thought to the situation of girls or to changing historical circumstances. What no one could foresee in the 1970s was the way in which early sexual maturation, our commitment to adolescent sexual expression, and the HIV virus would all coincide within the next two decades. In the 1990s, adolescent sexuality is more dangerous than ever before because the players are so young and the disease environment is so deadly. And the peril in this biological state of affairs is heightened by our social arrangements and our televisual environment. We have backed off from traditional
supervision or guidance of adolescent girls; yet we sustain a popular culture that is permeated by sexual imagery, so much so that many young women regard their bodies and sexual allure as the primary currency of the realm. (1997, p. 200)

Body Image

In a way, we can consider women’s bodies as cultural artifacts, continually molded by history and culture. Subjected to such pressures, the “natural body” is lost. What replaces it may take the form of the bewigged eighteenth-century countess, the wasp-waisted Victorian housewife, the leggy flapper, or the waif modeling Calvin Klein jeans. All are bodily reflections of the play of power within a society. (Hesse-Biber, 1996, p. 30)

The historical story of the female body is an intriguing one which describes how the pressure on girls to be a body has evolved and amassed, “making girls at the close of the twentieth century more anxious than ever before about their bodies and, therefore, about themselves” (Brumberg, 1997, p. xxvi). Body projects of girls today are more concentrated and routine compared to girls of the 1920s or even the 1950s. Although there are familiar aspects to body projects which are common between adolescents today and those of the past, the many differences that exist cannot be ignored. The age of first dieting in the past usually occurred in middle adolescence or later, whereas today, many girls as young as nine or ten begin watching the types and amounts of food that they eat (Brumberg, 1997). The standard of slimness today is much thinner than the ideal figure of the past. Dieting in the 1920s was somewhat of an experiment with the fun of fashion unlike today where it is a “way of life...for middle-class women and girls at the close of the twentieth century” (1997, p. 119). At the beginning of the century this preoccupation with the body was episodic rather than enduring, “it [body anxiety] characterizes the teen years of most middle-class girls, regardless of race; and it underlies their struggles with self-identity, peer relationships, and even educational and occupational choices” (Brumberg, 1997, p. 120).
"What makes the situation today especially urgent, however, is that the problem begins so early in life, when the female body first begins to gear up for reproduction" (Brumberg, 1997, p. xxiii). Brumberg further noted that puberty begins earlier today than ever before. Menstruation arrives early only in environments where living conditions provide healthy diets and protection from infectious disease. Although the conditions that allow this are positive, there are problems to consider. First, contemporary girls are healthier and reach puberty earlier than girls of the past, but no equal evolution has occurred cognitively or emotionally. Our society is full of physically mature children who are forced to deal with menstruation along with all of the other issues that physical maturation brings to attention, with less social support than at any other time in history. "Our society makes no special effort to help girls deal with the lag between their biological and their intellectual development. Although early maturation is known to increase vulnerability to all kinds of psychological and social problems" (Brumberg, 1997, p. 5). Many developmental similarities exist between adolescent girls of the Victorian era and those of today. Such commonalties include "self-consciousness, sensitivity to peers, and an interest in establishing an independent identity" (Brumberg, 1997, p. 97). The main difference between the two time periods is how girls today prioritize the body as their main individual project and understand their bodies to be an absolute statement of who they are.

Body image and how it develops involves many factors. What is important to realize is that shape is not all that matters in body image. Body image is "the picture of our own body that we form in our mind" (Schilder, cited in Rosenbaum, 1979, p. 63), attitudes individuals have toward their bodies, specifically the appearance of the body (Cash & Pruzinsky, 1990). Body image includes how satisfied or dissatisfied people are with their body as a whole, as well as with the features that make up that body. Rierdan and Koff (1997) wrote that

body image is thought to reflect the combined impact of actual body structure and function, early and continuing body-related experience, life long social response to
body appearance, and sociocultural values and ideals regarding the body (Fisher, 1990). Body image, thus, is a biopsychosocial construction, partially determined by, but not reducible to, the objective physical body. (p. 615).

Hutchinson (1994) writes of body image in a broad way which depicts “the psychological space where body, mind, and culture come together—the space that encompasses our thoughts, feelings, perceptions, attitudes, values, and judgments about the bodies we have” (p. 153).

Body image is usually thought of as becoming an overt concern as early adolescence approaches due to normative changes such as the beginning of puberty, which brings an increase in body fat, increased awareness of and interest in the opposite sex, and increased academic demands. These changes usually occur in the age range of 11-14 and may interact with the internalization of the cultural beauty ideal to encourage dieting or eating disturbances (Levine, Smolak, Moodey, Shuman, & Hessen, 1994). Females with this slender ideal may interpret pubertal weight gain and increased fat along with awakening sexual interests as negative (Fairburn & Garner, 1988). Weight gain and sexual attractiveness do not go together and the fear of fat is intensified with a strong desire to keep or obtain the slender body that agrees with a schema formed, most likely in childhood (Levine, Smolak, Moodey, et al., 1994).

Byely et al. (2000) found that over a 1-year period, body image satisfaction of girls ages 10-14 decreased while dieting behaviors considered problematic increased. “This was expected because the girls in our sample increased significantly in their pubertal development and body mass over the 1-year period” (p. 162). Hill and Pallin (1998) write that “to regard adolescence as the age that signals the start of concerns about physical appearance and dieting would be a mistake” (p. 406). They go on to note that history of dieting attempts from clinical patients with eating disorders as well as findings concerning dieting and drive for thinness in populations of young females, ages 9-10, are two such examples of evidence that body image issues do exist prior to adolescence.
"It has been suggested that the etiology of adolescent eating disorders can only be understood through the examination of childhood attitudes and beliefs" (Feldman, Feldman, & Goodman, cited in Schur et al., 2000, p. 75). Schur et al. (2000) found that 50% of their sample of third through sixth graders (male and female) wanted to weigh less than they currently did. Sixteen percent of these had attempted to alter their weight in some way, although caloric restriction was only reported by two children. The children in this sample were very knowledgeable about dieting although the most reported ways of attempting to lose weight by children was through exercise and choosing to eat alternative foods.

Although the majority of children in this age group are not acting on their weight concerns, the stage may be being set for subsequent eating problems. With the onset of puberty around the corner, girls, 85% of whom would like to stay the same or be smaller at their current age, will soon find normal growth and development heading them toward not only weight gain, but a higher proportion of body fat. At which time all the information they have about dieting may begin to come into play. On the other hand, boys' pubertal development will increase their weight and lean muscle mass and would tend to satisfy both boys who want to gain weight and those who want to be thin.... The data from children in this study tell us that, as adults and role models, we must be continually aware of the significant impact that our own attitudes and dieting behavior have on young children (Schur et al., 2000, p. 81; see also Attie & Brooks-Gunn, 1989; Killen et al., 1994).

Rosenbaum (1979) suggested that girls are socialized to be unable to accept their bodies. "In adolescence, when young women are developing a sense of the mature self, they may be highly sensitive to social cues" (Myers & Biocca, 1992, p. 117). This at a time of dramatic physical growth and change, including weight gain and an increase in the level of fat deposits due to sexual maturation. These changes have to occur for a female to be able to begin menstruation
and later reproduce. Steiner-Adair (1990) wrote that adolescent females are faced with the dilemma of coming to terms with and accepting their bodies as they are. However, at the same time, society tends to judge the adolescent female more for her outer appearance and the culture encourages her to change her body to fit an ideal of beauty which is narrowly defined. It is not surprising then that many adolescent females develop negative body images. Orenstein (1994) reported a Gallup poll as finding about two thirds of young females to have a distorted body image. Brumberg stated that by the age of thirteen, "53 percent of American girls are unhappy with their bodies; by age seventeen, 78 percent are dissatisfied" (1997, xxiv). It has been reported that more than half of adolescent females think that they should be on a diet or are on a diet. "They want to lose all or some of the forty pounds that females naturally gain between 8 and 14. About three percent of these teens go too far, becoming anorexic or bulimic" (Anorexia Nervosa and Related Eating Disorders [ANRED], 2000b, online). If a greater number of humans modeled acceptance for a wide variety of shapes and appearances as beautiful, this would most likely not be the case today.

Rosenbaum (1979) stated that changes in the body due to puberty play a large part in the development of the self. It is "the integration of sexual maturity into the totality of self-experience" (p. 62). For many adolescent females the body serves as a mirror, reflecting the self. Orenstein (1994) wrote that although there may be more messages concerning opportunities for success and achievement for girls than ever before, most girls know that their appearance still ranks tops as their defining quality. Media and cultural messages support this notion by continuously equating the socially ideal body with such qualities as professional success (Silverstein & Perdue, 1988), self-control, strength, masculinity (Orenstein, 1994), goodness and perfection (Brown & Gilligan, 1992), and power (Brumberg, 1997). Brumberg (1997) noted that young females see and comprehend the societal significance placed upon female appearance and deduce that their appearance is the root of feminine power.
Wadden, Brown, Foster, and Linowitz (1991) examined the importance of worries concerning weight in adolescent males and females. Results showed that preoccupation regarding weight and figure were normative worries for adolescent girls. Looks rated as the first worry, followed by weight and figure. In contrast, weight was the least of the worries for males, although looks rated second for boys and worry concerning physique was rated as only moderate. "Boys reported worrying the most about money, suggesting that financial success holds the same prominent position for adolescent males that weight and figure do for females" (p. 412). Girls reported significantly higher levels of anxiety concerning 10 out of 15 variables of worry than boys. For boys, grades were reported as being a significant source of anxiety out of the 15 variables. Girls also reported greater frequency of worrying on 9 out of 15 variables. This indicates that although worries such as looks and relationships with the opposite sex are experienced by both males and females as salient, girls worry about looks, weight, figure, and relationships with the opposite sex significantly more frequently and with greater intensity.

The notion that dieting and concerns about physical appearance are "normative" behaviors and attitudes for females seems to be a far too simplistic answer for such a complicated, enormous, and damaging problem. Steiner-Adair (1996) and Brown and Gilligan (1992) have written that young women are taught to reject who they truly are in favor of cultural ideals of women, confusing and contradictory as these may be. "In other words, it is not 'healthy' or socially adaptive or rewarding for a girl to accept her body; in fact, society tells adolescent girls that to compromise on their looks is pathological" (Steiner-Adair, 1990, p. 169).

Fredrickson and Roberts (1997), in their objectification theory, have reasoned that in American culture, girls and women tend to "see themselves through a veil of sexism, measuring their self-worth by evaluating their physical appearance against our culture's sexually objectifying and unrealistic standards of beauty" (cited in Fredrickson et al., 1998, p. 269). Therefore the "normative" view of females as preoccupied with their appearance could instead be a
consequence of women and girls, through vicarious and direct learning from models, male and female, throughout their lives (Bandura’s prevalence - see role models section), understanding that their physical appearance is important. So much so that their appearance can ascertain the way in which they are treated in their world, which in turn can impact both social and economic opportunities in life. In other words, appearance can have a major impact upon the opportunities and outcomes that girls and women have in their lives, both in their present and future.

Fallon and Rozin (1985) found that college men in their sample perceived their own figure, the figure most attractive to women, and their ideal figure as similar. In contrast, college-age women perceived their bodies/figures to be heavier than the figure they thought to be most attractive to men and they responded with an ideal figure which was thinner than both what they perceived themselves to be and what they thought men would see as most attractive. Cohn et al. (1987) studied adolescent male and female perceived body, ideal body, and body figure thought to be most attractive to the opposite sex. Adolescent females chose figures that were thinner than what they perceived themselves to be, but in comparing the discrepancy scores (current minus ideal) in the study done on college women (.86) to those done with adolescent females (.14), quite a contrast is seen. Interestingly, adolescent girls perceived males to prefer a figure that was heavier than their own current figure but still showed preference for a thinner figure than their current one. Tiggemann and Wilson-Barrett (1998) paralleled these findings in a study with a sample of girls ages 7-12, as did Hill and Pallin (1998) with 8-year-old girls and Monteath and McCabe (1997) with university students. Regardless of age, ideal figures were significantly smaller than current figures and figures selected as most attractive to boys. Monteath and McCabe (1997) did not assess figures which women perceived men to find most attractive.

It is clear that a large number of adolescent girls adapt themselves to meet the cultural images of physical beauty and conceptions of adulthood put forth, primarily, by men (Brown & Gilligan, 1992). de Beauvoir (1952) wrote that adolescence is the time when girls come to
understand that power is held mainly by males and that the female way of holding power is through acquiescence in becoming objects, both docile and revered. And Brumberg (1997) added that “[a]lthough elevated body angst is a great boost to corporate profits, it saps the creativity of girls and threatens their mental and physical health. Progress for women is obviously filled with ambiguities” (p. xxiii).

Eating Disorders

“The flight from womanhood is not a flight from uncertainty about feminine identity but from knowledge about it” (Chodorow, 1989, p. 43).

Body image disturbance has been strongly related to eating dysfunctions. Eating disorders typically include anorexia nervosa, bulimia nervosa, and those labeled as “eating disorders not otherwise specified” in the current American Psychiatric Association diagnostic manual (Harvard Mental Health Letter, 1997). The two best known eating disorders are anorexia nervosa and bulimia.

Anorexia is associated with starving oneself, low body weight for age and height, exorbitant exercising, and a concentrated anxiety in regard to weight gain. Also common is the denial that one is behaving in an abnormal or unhealthy manner along with a misperception of the body, by continually feeling or seeing ones body as “fat” although emaciation is obvious (Harvard Mental Health Letter, 1997). Weight, food, calories, and weight management techniques such as exercise become the central, most important, energy consuming part of the anorexics life. Life is dominated by controlling the body through food resistance and weight management (Eating Disorders Awareness and Prevention [EDAP], 1998).

The Harvard Mental Health Letter (1997) stated that the developmental period for onset of anorexia nervosa is usually during early or middle adolescence. Johnson, Sansone, and Chewning (1998) reported the average age as 16 although they indicate that some studies have
shown a bimodal distribution with ages 14 and 18 at the peaks (Halmi, Casper, Eckert, Goldberg, & Davis, cited in Johnson, et al., 1998). Adolescence is known, indubitably, as the time of greatest risk for the onset of anorexia, although it is known to occur anywhere between the ages of 10 and 40. They also note that although dieting behavior is at the core of this disorder, less than 25% of those diagnosed with anorexia have ever been overweight.

Also, important to note in regard to anorexia is the point that many females, whether they seek slenderness or saintliness or simply “don’t know” why they act as they do, women who starve themselves may be rejecting unacceptable biological and social demands -- a woman’s body and a woman’s place. If this idea is right, some women with eating disorders are making an inarticulate social protest -- a hunger strike (as it has been called) without a conscious political purpose. Fear of gaining weight may be just one cultural expression of the illness rather than its central feature. (Harvard Mental Health Letter, 1997, online)

It is not known “whether anorexia nervosa represents a distinct diagnostic entity, or simply an extreme point on a continuum of concern about weight” (Garner, Olmstead, & Polivy, 1984, p. 255). Garner et al. (1984) conducted a study which showed that those with strict clinical manifestations of anorexia nervosa are similar to females in the population who score as highly weight preoccupied on such items as drive for thinness, body dissatisfaction, maturity fears, bulimia, and perfectionism but statistically significantly dissimilar on scales measuring ineffectiveness and interoceptive awareness (see also Bruch, 1973; Hesse-Biber, 1996; Thompson & Schwartz, 1982).

Bulimia is typified by periods of dieting, and bingeing (at least twice a week, every week for up to three months), where methods such as purging, and use of laxatives and diuretics are used to emit food and fluids from the body (Harvard Mental Health Letter, 1997). Such behavior is driven by the unwavering dread of weight gain and fat (Dittrich, 1998b). Bulimia nervosa is known
as a cycle of self-maintained and self-battering, binge-eating and purging. The “binge” is characterized by the consumption of massive amounts of food at one sitting, which may quiet hunger as well as other psychological feelings. Eventually though, this intake of food makes the bulimic physically and emotionally uncomfortable and intense anxiety sets in concerning the fear of weight gain. The food then—absolutely—needs to be rid from the body and a rigorous schedule of extreme dieting, fasting, exercising, and use of laxatives and/or diuretics is resorted to (EDAP, 1998; Harvard Mental Health Letter, 1997). The age of onset for bulimia can occur anywhere between early adolescence to age 40 although it most commonly becomes “clinically serious” during late adolescence (Harvard Mental Health Letter, 1997).

The National Institute of Mental Health (cited in Holzgang, 1998) reported that the majority (90%) of those with eating disorders are adolescent or young adult women. This 90% does not include the 15% of the population of young women whose eating attitudes and behaviors are significantly disordered. ANRED (2000b), has estimated that among female adolescents, ages 10-20, one percent have what would be considered clinically diagnosed anorexia, and 4% of college age females have bulimia. This 5% estimation doesn’t include the percentage of females with other related eating disorders such as anorexia athletica, binge eating disorder, body dysmorphic disorder, nor those with subclinical eating disorders. The American Psychiatric Association (1994) has estimated that among the general population, 0.5-3% meet the criteria for a clinical eating disorder. However, it has been reported that the percentage is somewhat higher within young female populations (Collins, Kreisberg, Pertschuk, & Fager, 1982; Harrison, 1997; Harvard Mental Health Letter, 1997), although the percentage varies widely across studies.

Eating disorders are thought to evolve from a variety of sources. Some examples include: depression, low self-esteem, abuse (sexual, physical, emotional), dysfunctional families, and psychological difficulties (Dittrich, 1998b). Harrison (1997) noted that factors which are related to the onset of anorexia and bulimia are so comprehensive and diversified, that finding one
"cause" for these disorders will most likely be useless. Although these are valid sources, cultural aspects, which include modeling by people within the culture, need to be seriously considered.

"[T]he cultural component also needs to be recognized as one of the possible constituents in conceptualizing the etiology of eating disorders" (Dittrich, 1998b, online; see also Harrison, 1997; Steiner-Adair, 1990; White, 1992). White (1992) stated that there are four categories in which risk factors associated with anorexia and bulimia are found—psychological, familial, biological, and sociocultural. Risk factors from each of these categories interact, stirring up the likelihood of the development of an eating disorder.

Steiner-Adair (1990) ironically found that "[w]hat is put forward in the cultural ideal of physical and mental health for contemporary female adolescents is tied to the emergence of psychopathology in the form of eating disorders" (p. 162) so that, in essence, the culture surrounding the adolescent girl indicates that "it is not 'healthy' or socially adaptive or rewarding for a girl to accept her body..." (p. 169). Our society sends the clear message to females that it is "normative" to do what must be done to meet current beauty ideals, to the extent that it seems more normal for a woman to lean more toward eating disordered symptomatology than to take her body as it came, naturally, without obsession or anxiety (Steiner-Adair, 1990).

Hesse-Biber (1996) made the distinction between what she termed "culturally induced eating; a pattern of eating disordered symptoms in otherwise psychologically 'normal' women" (p. 82) and eating disorders. College students in her study presented with many of the same behavioral indications associated with anorexia and bulimia nervosa, such as extreme dieting and calorie restriction, bingeing and purging, diuretic and laxative use, in order to live up to societies small, body size requirement. "Yet they did not exhibit the full constellation of psychological traits usually associated with an eating disorder, such as maturity fears, interpersonal distrust, and perfectionism" (1996, p. 82), to name a few. In surveying the sample of college women, 77% chose the cultural model, while 23% chose the medical model as their ideal or desired image. On
the Eating Attitudes Test (EAT), 24% of those who chose the cultural model (ideal weight prescribed by the diet industry), compared to only 8% of those who chose the medical model (ideal weight prescribed by the medical profession), were found to be in the range of abnormal. Hesse-Biber concluded that there was a correlation or a "link" between societal definitions of the right body and the development of eating problems.

There were indeed women in my research sample who would be classified with an eating disorder.... They used eating as a mechanism to cope and to empower. In a sense, manipulating food intake is one culturally approved way that women can gain some influence over their environment. Control of their own bodies is a substitute for control over their economic, political, and social lives. (Hesse-Biber, 1996, p. 83)

Leon et al. (1993) stated that it may be that certain personality characteristics such as low self-esteem, depression, neuroticism, obsessional personality, avoidance of feelings, and significant feelings of ineffectiveness within a cultural context that highlights an ideal body and advocates body discontent in women. These personality characteristics in conjunction with the cultural context may act together so that an eating disorder becomes the way in which these psychopathologies are manifest. They found that negative emotional functioning and being incapable of labeling emotional stimulation were factors which strongly influenced the prediction of the risk for eating disorders in adolescent females. Button, Loan, Davies, and Sonuga-Barke (1997) found support for the suggestion that eating disorders can act as a catalyst to deficits in self-image and low self-esteem. Griffiths et al. (1999) found no significant differences in self-esteem among three groups of patients diagnosed with anorexia, bulimia, and eating disorders not otherwise specified.

Interestingly, Davis, Claridge, and Fox (2000) hypothesized, based upon their experience with females and eating disorders, that women who were more attractive would have a greater
rate of weight preoccupation than women who were less attractive. Their findings were supportive of this hypothesis and they wrote:

It is reasonable to assume that attractive children are more likely than those who are less attractive to be admired for their physical attributes. Children are also more likely to mold their self-identities according to values reinforced and internalized from an early age. In the course of normal development, they are also likely to distinguish goals that are more easily within their grasp from those that are largely unattainable (Cramer, 1995). Therefore, an attractive young girl may be more likely than one who is unattractive to identify with, and aspire to, the cultural ideal of female sexual attractiveness. (Davis et al., 2000, p. 71)

"Further research found that such stringent dieting to achieve an 'ideal' figure can play a key role in triggering eating disorders" (Holzgang, 1998, online). Among the possible triggers for people who are susceptible to eating disorders, dieting is possibly the most common (ANRED, 2000a). Although America leads other nations in the number of women working in and contributing to a world once controlled by men, it also has the largest number of anorexic females (Wolf, 1991). "Many women in this society do not fit neatly into the categories of anorexia or bulimia, but fall on a continuum of eating disordered behaviors" (Dittrich, 1998b, online). Dittrich (1998) also noted that the medical criteria outlining anorexia states that a person can be considered anorexic if they are 15% below that weight which would be considered "normal" for height and age. Most of the models and beauty contestants that are presented so profusely to the world in forms so ardently consumed and treasured by adolescents, would fit this characterization.

Indeed, the fear of fat is widely spread in this society, so that many women resort to self-destructive or painful behavior.... The unrelenting pursuit of thinness, which is the hallmark of the eating disorder anorexia nervosa, seems in part to have its origins in the culture's transitions toward a thin beauty ideal. Self-destructive
dieting behavior is culturally supported. (Dittrich, 1998b, online)

Self-Esteem

For a woman to take pride in her body for herself, rather than as an instrument or as an object, is a radical act. For women to proclaim that comfort and pride at whatever size they may be creates a chink in the armor of a patriarchal order. Taking this stance is difficult and hard to do on our own. But as more women reject the stereotype of driven slimmness and exhibit a pleasure in women's physical variety, individual women can draw on that collective strength to build acceptance and confidence. (Orbach, 1982, p. 69)

Women are known to suffer from low self-esteem and depression in conjunction with dissatisfaction with their body. “Low self-esteem has been found to be related to body image dissatisfaction and various eating disorders / disturbances” (Dittrich, 1998b, online).

Schickendanz et al. (1993) suggested that having high self-esteem can help adolescent girls deal with their bodies, even in light of the unrealistic ideals with which they are surrounded. Orenstein (1994) stated that there is a link between self-esteem and a distorted body image. Preoccupation with dieting and weight has been called a “normative obsession” of women in America. This obsession involves restriction and vigilance in attempting to control food intake for fear of fat or the habitual monitoring of food intake. It is often the case that both happiness and self-esteem are determined, to a large extent, by the numbers that appear on the scale, that is, whether one weighs in above the desired number or below it (Brumberg, 1997). Brumberg also stated that the way we think and talk about the terrain of our bodies is an important determinant of our psychological well-being. Psychological tests, known as “body cathexis scales,” confirm that in the contemporary United States there is a deep connection between an individual’s sense of self and his or her level of satisfaction with different parts of the body. Not surprisingly, there is more self-hatred among women than men, and women tend to be especially dissatisfied about the lower body—the waist, hips, thighs, and buttocks. To put it another way:
when an American woman dislikes her thighs, she is unlikely to like herself. This sad reality needs to be factored into our understanding of girls and the way in which they develop their sense of self. (1997, pp. 127-128).

Exeter University conducted a survey in 1998 with 37,500 females ages 12-15. Findings indicated that more than half of the girls listed appearance as the most significant worry in their lives. Further, girls ages 12-13 indicated that of girls who had low self-esteem, 59% were also dieting (cited in ANRED, 2000b). Dittrich (1998a) cited a study from the AAUW concerning self-esteem and body image with 36,000 Minnesota students. Findings indicated that girls who had greater body image disturbance were three times as likely as boys in their own age group to have negative feelings toward themselves and think that others to see them negatively as well.

“Women and girls are consistently taught from an early age that their self-worth is largely dependent on how they look” (Dittrich, 1998a, online; see also, Cooke, 1996). Wolf (1991) bluntly illustrates this point by presenting the fact that prostitution and modeling are the only two occupations in which women make a greater amount of money than men.

As long as they feel so unhappy with their bodies, it is unlikely that they can achieve the sexual agency that they need for complete and successful lives in the contemporary world. Girls who do not feel good about themselves need the affirmation of others, and that need, unfortunately, almost always empowers male desire. In other words, girls who hate their bodies do not make good decisions about partners, or about the kind of sexual activity that is in their best interest. Because they want to be wanted so much, they are susceptible to manipulation, to flattery, even to abuse. Body angst is not only a boost to commerce...; it makes the worst forms of sexual flattery acceptable, which explains why some girls feel ambivalent about sexual harassment and do not know how to respond. (Brumberg, 1997, p. 212)
Button (1993) noted that a major and consistent theme in the etiology of eating disorders is that self-image deficits, especially in low self-esteem, are thought to occur well before eating disorders set in. The results from a study by Button, Barke, Davies, and Thompson (1996) support the proposal that self-esteem is important in predicting a move from the mere avoidance of fat to severe eating disorders. The girls in their study with the lowest self-esteem scores at age 11 and 12 were eight times more at risk of scoring high on the Eating Attitudes Test (EAT) at age 15 and 16 than were girls with high self-esteem. Button et al. (1997) found that of 609 females aged 15-16, 56% felt they were too fat and had used some form of dieting to control weight. Thirty-two percent exhibited high scores on anxiety and 43% had scores indicating low self-esteem. Thirty-one of these females were interviewed concerning eating behaviors and self-esteem. "The most striking feature was the spontaneity and frequency with which girls referred to their physical appearance when elaborating on their general dissatisfaction with themselves" (1997, p. 45).

Geller, Srikaneswaran, Cockell, and Zaitsoff (2000) summarized their findings regarding the risk for eating disorders among adolescents in the following way:

[B]asing self-worth to a large extent on shape and weight is associated not only with eating disorder symptoms, but also with general low self-esteem. Possibly, valuing body shape and weight, features that are largely genetically determined but are culturally mandated to be thin, is a setup for negative feelings about the self and a risk factor for eating disorder symptoms. Second, given the importance placed on both body and face in the symptomatic group relative to the remainder of the sample, encouraging adolescent females to broaden their definition of self beyond appearance and to include other dimensions such as sports, friendships, hobbies, and competence in academic pursuits might be protective of eating disorder symptom development. (p. 344)
On the other side, however, Tiggemann and Wilson-Barrett (1998) found that in girls, ages 7-12, body discontent and self-esteem were not correlated, and cited findings of several other researchers whose findings support theirs among college women (Friedman & Brownell 1995; Silberstein, Striegel-Moore, Timko, & Rodin, 1988; Tiggemann, 1992). "These authors reasoned that this surprising result might somewhat paradoxically be a consequence of weight dissatisfaction being so prevalent among young women as to be a normative" (Tiggemann & Wilson-Barrett, 1998, p. 87).

Summary

At this time in American society, adolescent girls, who are experiencing puberty and physical changes earlier than ever before, are faced with the challenge and pressure of a standard of physical attractiveness that hates fat. This hatred is in direct opposition to the physical changes that need to take place to ensure future reproductive success and present and future health. Adolescent females are bombarded with images of women and voices from society that portray the idea that the "right" female body is real and attainable by the majority of women when in truth only a minority of women possess the body so abundantly presented and adored.

Possible consequences of this type of modeling include negative assessments of both inner and outer aspects of one's self. Also, when girls feel the pressure and succumb to this ideal body type, resources that could be directed in other important areas of life are taken and directed at the physical self. Dieting can become a problem, and can range from mild dieting to dieting which may resemble some types of eating disorders and, at the extreme, clinical eating disorders. Dieting of any kind, at young ages especially, can affect physical and mental development, physical health, mental health (i.e., depression), and energy level.

Many variables interact together to produce outcomes such as full blown eating disorders, which is only one of many consequences that girls and adult women may experience in response
to negative feelings about their bodies. The primary goal of this study is to examine how modeling is related to adolescent female body image. More importantly however, this study offers the unique contribution of, and seeks to extend research through an investigation into why female adolescents choose the female role models that they do, something which previous research has not done. This study also attempts to examine self-esteem, and the risk for, or development of eating disorders and their correlations with role models and body image.
CHAPTER III
METHODS

Sample

The sample for this study consisted of 159 (N = 159) females ranging in age from 13-23. The participants were all students attending either a freshman center (n = 100, ages 13-15) or a university (n = 59, ages 18-23). The freshman center participants were enrolled in either a health or English class. College undergraduates were enrolled in one of two Family and Human Development courses. Thirty-seven percent of the sample were females ages 18-23, with a mean age of 20.6 and standard deviation of 1.32. In the freshman center sample, 45% of the participants were in ninth grade and 18% were in eighth grade at the time these data were collected. The mean age of the freshman center participants was 14.4 with a standard deviation of .70.

Research Design

This was a correlational study where female participants completed a questionnaire to assess body image, risk for or current eating disturbance, and level of self-esteem. The last section of the questionnaire asked participants to list one female within their immediate or extended family whom they most admired or desired to be like. Respondents were also asked to name one person outside of their family whom they most admired or desired to be like. A space was provided following the name of each listed role model for participants to record why they admired or wanted to be like each of the two people named. Most participants listed from one to three reasons for choosing the specific role model that they did. The “why” aspect was important because role models were classified by type (physical or non-physical) according to the answers given in this section.
Data Collection

The data for this study were collected at a freshman center and at a university. The freshman center was selected due to a contact teacher who was interested in this study and happened to also be the physical education teacher when this study was in its planning stages in May of 1997. The university, and specifically Family and Human Development courses were selected simply for convenience. In March of 2000 the Institutional Review Board (IRB) at the university approved this research study (see Appendix A), whereupon approval from the Cache County School District was sought. The school board had several concerns regarding the study, which included the IRB decision to label this study as having a potential to pose greater than minimal risk to participants. Confidentiality was also a concern due to the proposed data collection strategy of going into all female physical education classes and having participants spread out on the floor or in a classroom to complete the surveys. The school board, as well as the principal and vice principal, felt that too many girls were in these classes for them to feel secure or even have guaranteed confidentiality in answering questions of such a personal nature. Also, the physical education teacher was not interested or willing to have a research study conducted in her classes.

The school board delayed approval decisions until a meeting between the researchers, the principal, and vice principal had been held. At this meeting it was proposed that the girls take the questionnaires home to fill out and then return them to the instructor who gave them out. At that point almost immediate approval was gained from the freshman center administration. A meeting with the contact teacher was also held on this day. The contact teacher, formerly the physical education teacher, was now the health teacher. She was willing to give extra credit to those girls who volunteered to participate and whose parents gave consent, as well as come up with something for the male students in her classes to do for extra credit. She also found one
other teacher, an English teacher, to lend her time to this study as well. Following this meeting the Cache County School District gave immediate verbal approval over the phone, and written approval was received the following week (see Appendix B).

Packets were delivered to the contact teacher, who took over from there in recruiting participants, offering extra credit, and distributing and collecting the packets. The packets consisted of (a) a page of clear instructions, (b) two parent/adolescent consent forms—one for their records and one to return with the questionnaire, and (c) the questionnaire. The questionnaire consisted of six sections in this order: demographic information, a section measuring subjective cognitive and affective body dissatisfaction, another measuring "self-attitudinal aspects of the body-image construct" (Cash, 1994, p. 1), a section measuring eating disturbance, a section measuring self-esteem, and a section on role models (see Appendix C for the complete questionnaire packet). One hundred and nineteen packets were delivered at the end of March and 105 were returned. After reviewing the consent forms it was discovered that 23 forms had parent/guardian signatures but were missing the adolescent's signature. The contact teacher graciously agreed once again to help and was able to match the adolescent to the parents' last names on the forms. This time 18 of the 23 came back, making a total of 100 (84% participation) returned questionnaires from the freshman center.

Data collection at the university began the first week of May 2000 in two Family and Human Development courses (due to the high rate of female enrollment and convenience). Packets were prepared in the same way as they had been for the younger participants. In one course the study was briefly explained and extra credit was offered to those who participated. Males received extra credit by finding a female participant. Offering the extra credit made all the difference in the return rate. In the second course, extra credit was not offered and the return rate was much lower than that of the first course. In the second course the study was briefly explained and it was clearly stated that this was purely voluntary and the only thing in it for those who
participated was a copy of the final results, if they included their address with their signature on the consent form. The initial response was overwhelming with the majority of females in the class picking up a packet. Unfortunately the return rate did not match up. All questionnaires were completed outside of class time and returned the following class period, aside from a few which were later turned into one of two designated places. Seventy-one of the 100 (71% participation) distributed forms were returned but 12 of those who participated were over the age of 23, for a total of 59 completed and useable questionnaires (see Appendix D for the university questionnaire).

Measurements

Demographic Information

Participants were provided with a space to record the following information: age, year of birth, and current grade in school. College undergraduates were asked to provide only age, and year of birth.

Figure Rating Scale

The Figure Rating Scale (FRS; Stunkard, Sorenson, & Schlusinger, 1983) was designed to assess satisfaction with one’s body size. It consists of nine figure drawings of adult females ranging from very thin to very obese. Participants choose their ideal figure followed by the figure that they think most resembles their own body and finally the figure that best represents how they feel most of the time. Scores are obtained by subtracting (1) think minus ideal and (2) feel minus ideal to obtain subjective body dissatisfaction scores (Thompson & Altabe, 1991). Both affective and cognitive figure ratings are obtained due to the distinction that some participants make between the two. Thompson and Altabe (1991) found that there were “subjects [who] felt larger than they actually thought they looked, [which] was positively associated with greater eating
disturbance and lowered self-esteem" (p. 618). The use of both ratings by participants may help to "explain unique variance associated with eating disturbance" (Thompson & Altabe, 1991, p. 618). Two-week test-retest reliabilities reported by Thompson and Altabe (1991) were $r = .89$ to $r = .92$. Studies examining the association between the figure drawings and actual measurements of body mass found validity of the FRS to be $r = .63$ to $r = .92$ across studies (Cohn et al., 1987; Mueller, Joos, & Schull, 1985; Sorenson, Stunkard, Teasdale, & Higgins, 1983). Sherman, Iacono, and Donnelly (1995) suggested that when studying body image in children and adolescents, face validity could be accomplished by using drawings which depict adolescent bodies instead of adults (see Appendix E for permission-to-use letter).

**Multidimensional Body-Self Relations Questionnaire**

The Multidimensional Body-Self Relations Questionnaire (MBSRQ; Cash & Pruzinsky, 1990) is a 69-item, 5-point Likert scale inventory. Subscales used in this study include the physical appearance evaluation (PAE), a seven-item subscale with two reverse-scored items, which measures feelings and level of satisfaction or dissatisfaction with one's physical attractiveness. Example items include "I like my looks just the way they are" and "I like the way my clothes fit me." Estimates of reliability were alpha = .88 (for females) and $r = .91$ at one month test-retest (Cash, 1994). The physical appearance orientation (PAO) is a 12-item subscale with four reverse-scored items, which measures how invested respondents are in their appearance. Example items include, "It is important that I always look good" and "I usually wear whatever is handy without caring how it looks," (Cronbach's alpha = .85 and $r = .90$ at test-retest; Cash, 1994). The body-areas satisfaction subscale is a nine-item subscale which focuses on satisfaction with specific body parts. This subscale asks respondents to use the 1 to 5 Likert scale to assess their satisfaction with such body parts as the face, upper torso, muscle tone, and so forth (Cronbach's alpha = .73 and $r = .74$ at one month test-retest).
Overweight preoccupation is a four-item subscale which makes an assessment of anxiety concerning fat, dieting, restrained eating, and attentiveness to weight. Example items include "I constantly worry about being or becoming fat" and "I am very conscious of even small changes in my weight" (Cronbach’s alpha = .76 and $r = .89$ at test-retest; Cash, 1994). Self-classified weight is a two-item subscale which assesses how respondents see and identify their weight. Example items include "I think I am:” and “From looking at me, most other people would think I am:” 1. Very Underweight, 2. Somewhat Underweight, 3. Normal Weight, 4. Somewhat Overweight, 5. Very Overweight (Cronbach’s alpha = .89 and $r = .74$ at test-retest). “All subscales possess acceptable internal consistency and stability” (Cash, 1994, p. 1). The MBSRQ and its subscales have been widely used in the literature concerning body-image. Numerous studies have yielded evidence of convergent, discriminant, and construct validity of the MBSRQ (Brown, Cash, & Mikulka, 1990; Cash & Henry, 1995; Cash & Labarge, 1996; Cusumano, & Thompson, 1997; Jacobi & Cash, 1994; Rieves & Cash, 1996; Thompson, Coover, Richards, Johnson, & Cattarin, 1995; see Appendix F for permission-to-use letter).

Eating Attitudes Test

The Eating Attitudes Test (EAT-26; Garner, Olmstead, Bohr, & Garfinkel, 1982) is a standardized measure used to screen for eating disorders by tapping into symptoms and concerns typical of persons with eating disorders. The EAT-26 is not used alone to diagnose an eating disorder, although results on the EAT-26, along with interviews, consistently show that few false negatives are produced by the EAT-26. A score of 20 or more is an indicator of the possibility of an eating disorder. This measure consists of 26 items with only one reverse-scored item. Each item has six possible choices ranging from "always" to "never" and three subscales, which are dieting, bulimia and food preoccupation, and oral control.

The dieting subscale consists of 13 items and reflects a fixation with weight, specifically,
being thinner and a pathological avoidance of foods that are fattening. This scale has been found to be extremely reliable at alpha = .90 with a clinical sample, and .86 for a nonclinical sample and is “associated with several parameters of the multidimensional body-image construct” (Garner et al., 1982, p. 877). Bulimia and food preoccupation has six items dealing with a preoccupation with thoughts about food and behaviors typical of bulimia. Unlike the dieting subscale, this scale is related to bulimia and a heavier body weight, although both scales are related to body image disturbances. Garner et al. (1982) reported a reliability coefficient of alpha = .84 with a clinical anorexia nervosa group and .61 for a nonclinical female comparison group. Lastly, the oral control subscale consists of seven items reflecting high self-control concerning food as well as items dealing with perceptual social pressure to gain weight (alpha = .46, nonclinical sample). “High scores...are related to a lower weight and the absence of bulimia” (Garner et al., 1982, p. 877). Cronbach’s alpha for the overall measure has been reported at .90 for a clinical group and .83 for a nonclinical comparison group (Garner et al., 1982).

The EAT-26 is one of the most widely used tests for measuring anxiety and symptoms associated with eating disorders (Garner, 1997). This measure has been used extensively in the body image and eating disorders literature. Example items include “Am terrified of being overweight,” “Aware of the calorie content of foods that I eat,” “Vomit after I have eaten,” and “Like my stomach to be empty.” The EAT-26 is statistically significantly correlated with the Eating Disorders Inventory (EDI; Garner, Olmstead, & Polivy, 1983), which implies concurrent validity (see Appendix G for permission-to-use letter).

Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) is a 10-item scale with five reverse-scored items, which measures self-esteem. Demo (1985) reported a test-retest reliability of \( r = .85 \). Hagborg (1996) studied 120 middle school students to investigate the construct validity
of the RSES, and reported no statistically significant differences between gender or grade, and internal consistency was high. Findings suggest that among middle school students, the RSES is a good measure of overall self-esteem. Alfonso (cited in Cusumano & Thompson, 1997) found the RSES to be the most used assessment of self-esteem. Norms, good to excellent reliabilities, and validity have been shown through its use with a diverse range of samples.

Wylie (1974) reported Rosenberg's (1965) coefficient of reproducibility, which can be one indicator of reliability, at .92 with subjects from a New York high school. Wylie (1974) also reported that Silber and Tippett obtained a $r = .85$ two-week, test-retest reliability coefficient with 28 college subjects. Griffiths et al. (1999) compared the RSES with the Coopersmith Self-Esteem Inventory (SEI) using a sample of patients diagnosed with varying eating disorders. Results indicated the RSES "can be deemed to have good construct validity for this dieting disordered sample but the same cannot be said for the SEI" (p. 229). The RSES was also found to have convergent validity which was not true for the SEI. Wylie (1974) noted that "[i]t is impressive that such high reliability is attainable with only 10 items and that such a short scale has yielded relationships supporting its construct validity" (p. 189). Example items on the RSES include "I feel that I'm a person of worth, at least on an equal plane with others" and "I certainly feel useless at times." Respondents use a 4-point scale ranging from "strongly agree" to "strongly disagree" to record their answers (Rosenberg, 1965; see Appendix H for permission-to-use letter).

Role Models

The role models section was administered last. Each participant provided the name of one role model within their nuclear or extended family. Next they were asked to identify their role model specifying what they do or who they are so that someone reading their response could identify them (sister, model, actress, musician, neighbor). The instructions then asked participants to list why they chose this person as their preferred role model so that the reasons for
choosing a particular role model could be identified and coded as well as to identify why participants this age choose the role models that they do. On the following page, participants were asked to name one female role model from outside of their family followed by a brief description of this person and why they chose this person out of all others as their role model. It was felt that simply asking participants to list only one role model would limit the majority of participants to listing their mother or another close family member. Therefore, in order to broaden the research scope, both a role model inside and one outside the family were requested.

Ethical Considerations

Approval was sought from the USU Institutional Review Board, the Cache County School District, South Cache Freshman Center administrators, and those teachers who allowed participation in their classes. Informed consent was required from all participants and parental consent was required from participants under the age of 18. The study was thoroughly explained to the participants and parent or legal guardians in an approved consent form, which was signed and returned by each participant. A copy of the consent form was also included in each packet for participants to keep on file.

Participation in this study was purely voluntary. Participants were told of the basic nature of the study by the researcher or the administering teacher. Prospective participants were told that this study was an investigation into the attitudes and beliefs of girls their age regarding their bodies and how these beliefs are related to other areas of their lives. All information provided by the participants was anonymous. Participants were informed of this anonymity, as well as the willingness of the investigator to answer any questions that they had. However, due to anonymity, it was not possible to report specific individual scores on the EAT-26, where a score of 20 or more is an indicator of the possibility of an eating disorder, to teachers or parents.
Data Preparation

Data preparation in this study involved labeling each questionnaire with an identification number and then entering the data provided by each subject. The only part of the questionnaire that had to be further coded was the section on role models. Role models and reasons were first numerically coded (i.e., mother = 01, actress = 02, nice = 04, pretty = 05) and then entered with the rest of the corresponding data. Questions not answered by participants were coded as missing values (00).

Data Analysis

Hypotheses one through three (there is no statistically significant relationship between type of role model chosen and level of body image [HO 1], patterns of eating disturbance associated with eating disorders [HO 2], and level of self-esteem [HO 3]) were tested using two-tailed t tests. Hypothesis four, there is no statistically significant relationship between type of role model chosen and age of participant, was tested using the Pearson chi-square, two-tailed significance test. Hypotheses five and six, there is no statistically significant relationship between level of body image and patterns of eating disturbance associated with eating disorders (HO 5) and level of self-esteem (HO 6), were tested using Pearson correlation coefficients (two-tailed significance). Finally, hypothesis seven, there is no statistically significant relationship between level of body image and age of participant (HO 7), was tested using a two-tailed t test.
CHAPTER IV
RESULTS

The purpose of this chapter is to examine the reliability and validity of the measures used in this study to insure their appropriateness for addressing the research objectives. Following this, relevant statistical analyses and findings are presented for each of the hypotheses.

Psychometric Properties

It is important that the reliability and validity of the measures be first addressed so as to insure that the measures operated in a consistent and dependable fashion and measured those constructs that they were meant to measure. Reliability and validity of the Multidimensional Body Self-Relations Questionnaire (MBSRQ), the Eating Attitudes Test (EAT), and the Rosenberg Self Esteem Scale (RSES) are discussed in the following sections. Cronbach’s alpha was used to estimate reliability coefficients, and Pearson correlations were used to examine interscale relations.

MBSRQ

The MBSRQ is a 69-item inventory used to assess attitudes concerning body image. “Here, body image is conceived as one’s attitudinal dispositions toward the physical self” (Cash, 1994, p. 1). Five subscales concerning fitness, health, and illness were omitted for this study due to the length of this measure and the length of the resulting questionnaire used in this study. Although these subscales would have been interesting to include in this study, other information was needed to address the research questions and therefore these were excluded. Reliability coefficients reported by Cash (1994) ranged from .73 to .89, median = .85 on the five subscales used in this research study. The coefficients obtained in this study for the five subscales were slightly lower than those reported by Cash (1994), ranging from alpha = .66 to alpha = .83, median
Table 1

Reliability Coefficients, Interscale, and Intrascala Correlations

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Appearance evaluation (MBSRQ)</td>
<td>.75</td>
<td>-23</td>
<td>.69</td>
<td>-.37</td>
<td>-.47</td>
<td>-.29</td>
<td>.07</td>
<td>-.02</td>
<td>-.20</td>
<td>.53</td>
</tr>
<tr>
<td>2. Appearance orientation (MBSRQ)</td>
<td>.83</td>
<td>-.28</td>
<td>.41</td>
<td>.15</td>
<td>.33</td>
<td>-.09</td>
<td>.19</td>
<td>.27</td>
<td>-.23</td>
<td></td>
</tr>
<tr>
<td>3. Body Areas satisfaction (MBSRQ)</td>
<td>.81</td>
<td>-.47</td>
<td>-.52</td>
<td>-.37</td>
<td>.02</td>
<td>-.08</td>
<td>-.25</td>
<td>.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Overweight preoccupation (MBSRQ)</td>
<td>.80</td>
<td>.34</td>
<td>.75</td>
<td>.09</td>
<td>.35</td>
<td>.68</td>
<td>-.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Self-classified weight (MBSRQ)</td>
<td>.66</td>
<td>.24</td>
<td>-.04</td>
<td>-.11</td>
<td>.14</td>
<td>-.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Dieting (EAT-26)</td>
<td>.80</td>
<td>.27</td>
<td>.40</td>
<td>.93</td>
<td>-.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Bulimia and food preoccupation (EAT-26)</td>
<td>.44</td>
<td>-.07</td>
<td>.50</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Oral control (EAT-26)</td>
<td>.40</td>
<td>.60</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Total EAT-26 score</td>
<td>.78</td>
<td>-.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Self-esteem (RSES)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.90</td>
</tr>
</tbody>
</table>

Note. Coefficients on the diagonal are Cronbach alpha coefficients; numbers above the diagonal are Pearson correlation coefficients depicting interscale and intrascala relationships.

=.80. The subscales used in this study included appearance evaluation (alpha = .75), appearance orientation (alpha = .83), body-areas satisfaction (alpha = .81), self-classified weight (alpha = .66), and overweight preoccupation (alpha = .80). The self-classified weight subscale, which is comprised of two questions, produced the lowest reliability coefficient (.66) of the five subscales in this study, while the coefficient reported by Cash (1994) on this subscale was the highest of the five subscales (.89). Two items were omitted from the appearance evaluation subscale due to the already difficult task of obtaining approval because they were deemed somewhat risky. The two omitted items were “My body is sexually appealing” and “I like the way I without my clothes on.”
Interscale correlations exhibit patterns which were consistent with expectations, indicative of construct validity. Pearson correlations between the five subscales ranged from $r = .69$ to $r = -.52$. A weak negative correlation was obtained between appearance evaluation, where high scorers are more positive about and satisfied with their appearance, and appearance orientation, where high scorers invest a great deal in their appearance, of $r = -.23$. Shared variance between the two subscales was only about 5%, which makes sense theoretically since one could very well be satisfied with their appearance but still invest a great deal in or place a lot of importance on appearance.

In this sample, girls who scored high on appearance evaluation were more likely to score low on appearance orientation, although the two were not strongly correlated, suggesting little relation between these two subscales, as would be expected. Appearance evaluation and body-areas satisfaction (high scorers are in general content with specific areas of their body) yielded the highest correlation of $r = .69$, sharing 48% of the variance. This makes sense theoretically since one would expect that those who are satisfied with their overall appearance would likely be more satisfied with separate areas or facets of their body than those who are not (i.e., face, mid torso, muscle tone).

Finally, body-areas satisfaction and self-classified weight (high scorers label and perceive themselves to be overweight) correlated at $r = -.52$, with 27% shared variance. As might be expected, the participants in this study who were content with specific areas of their body were more likely to perceive and label themselves as weighing less. Further supporting construct validity, the appearance evaluation subscale, which is similar to the body-areas satisfaction subscale, correlated in a like manner with self-classified weight ($r = -.47$).

Intrascale correlations between the MBSRQ, the EAT-26, and the RSES measures were moderate to weak and all correlations were in the anticipated direction. This supports the fact that the measures, as intended, measured different constructs, with those more similar to the MBSRQ
obtaining higher correlations and those designed to assess differing constructs having lower correlations. Since the MBSRQ is meant to tap into attitudes towards one's body image and not into the construct of eating disorders and the RSES is meant to tap into the construct of self-esteem these results appear to make sense and were judged adequate for the purposes of this study.

EAT-26

The EAT-26 is a standardized measure comprised of three subscales and is used to screen for abnormal or "disturbed eating patterns" when used with nonclinical samples by tapping into symptoms and concerns typical of those diagnosed as having an eating disorder (Garner et al., 1982, p. 877). Reliability coefficients for the three subscales in this study were (with reliability coefficients reported by Garner et al. [1982] on a nonclinical sample in parentheses): dieting, alpha = .80 (.86); bulimia and food preoccupation, alpha = .44 (.61); oral control, alpha = .40 (.46); and the overall EAT-26 alpha was .78 (.83). In comparison to reported reliability coefficients, these alphas appear compatible, although the obtained alpha of .44 for the bulimia and food preoccupation subscale was somewhat lower than the alpha = .61 reported by Garner et al. (1982).

The low reliability coefficients of the two subscales do warrant some caution and deserve some attention. The subscales of the Eating Attitudes Test are multidimensional in that they measure different patterns of disturbed eating behaviors. One way to illustrate this would be to view the oral control subscale on one end of a continuum, measuring symptoms typical of anorexia nervosa, the dieting subscale in the middle, measuring symptoms that are more common among a larger portion of the female population than the other two subscales, and the bulimia and food preoccupation subscale on the other end of the continuum measuring behaviors more typical of those with symptoms of bulimia.
The only study that this researcher was able to find that addressed reliability of the subscales separate from the reliability of the measure as a whole was from Garner et al. (1982). This seems strange since the EAT-26 is such a widely used measure both in the literature and as a clinical tool. Garner et al. (1982) did not go into detail concerning the low reliability coefficients of the two subscales, but did write that in some cases the dieting subscale could be used on its own to measure for patterns of eating disturbance. This researcher interprets this as meaning that the dieting subscale may, on its own, especially in nonclinical settings, be able to catch close to the same percentage of those with or who are at risk for eating disorders as it does with the two, more specific subscales measuring more extreme behaviors. Those with higher scores on the dieting subscale would be considered at greater risk for eating disorders, whereupon the use of the other two subscales may then be warranted.

Pearson correlations among the three subscales in this study were somewhat weak but in tune theoretically with what would be expected. The correlations between the overall EAT-26 scores and the three subscales were high with correlations reported by Garner et al. (1982), with a nonclinical sample in parentheses: dieting, $r = .93 (.93)$; bulimia and food preoccupation, $r = .50 (.64)$; and oral control, $r = .60 (.60)$ (see Table 1). Correlations between subscales are as follows with findings from Garner et al. (1982) in parentheses: dieting and bulimia and food preoccupation, $r = .27 (.51)$ with 7% shared variance; dieting and oral control, $r = .40 (.39)$ with 16% shared variance; and bulimia and food preoccupation and oral control, $r = .07 (.02)$. The lower correlation between the bulimia and oral control subscales does make sense theoretically since these scales are designed to tap into different types of eating behaviors and beliefs. In this study, girls who scored high on one subscale were more likely to also score high on the other subscales, which tends to support theoretical expectations.

All of the EAT-26 subscales had low to moderate correlations with the RSES, ranging from $r = -.37$ to $r = .03$ (see Table 1). Since this measure was designed to measure a construct
quite different from eating behavior constructs, these correlations were deemed adequate for the purposes of this study.

RSES

As discussed earlier, intrascale correlations were low to moderate ($r = .56$ to $r = -.37$, median = -.23) yet the RSES is designed to tap into a construct quite varied from eating disorders or body image constructs.

Conclusions

Reliability coefficients were generated to examine internal consistency within each subscale and/or measure. That is, how reliably each subscale and/or measure worked with the particular sample used in this research study. Interscale correlations were obtained using Pearson correlation coefficients to examine construct validity, that is, how well each subscale and/or measure, measured the intended theoretical constructs (i.e., body image, eating disorders, self-esteem). While all of the reliability coefficients and interscale correlations were not high, most were at least satisfactory and were deemed adequate for the purposes of this study.

Research Hypotheses

The purpose of this section is to present and briefly discuss each of the seven research hypotheses and the statistical results obtained from the sample of 159 female participants in this study. The following is a list of the seven null hypotheses tested:

HO 1: There is no relationship between the type of female role model chosen by adolescent females and level of body image.

HO 2: There is no relationship between type of role model chosen and patterns of eating disturbance associated with eating disorders.

HO 3: There is no relationship between level of self-esteem and type of role model chosen.
HO 4: There is no relationship between age of subject and type of female role model chosen (freshman center versus university).

HO 5: There is no relationship between level of body image and patterns of eating disturbance associated with eating disorders.

HO 6: There is no relationship between level of body image and level of self-esteem.

HO 7: There is no relationship between level of body image and age of subject (freshman center versus university).

Adolescent Reasons for Choosing a Role Model

Given the relevance of the role model information to the research questions, it is important to discuss these data. Participants were asked to list reasons for choosing the two specific role models (one within and one outside of their family) that they did. For purposes of this study, only the section focusing on role models outside of the participant's family were used. Up to three reasons for choosing a role model were coded for each participant. Those who included one physical reason or more in their reason section were coded into group one (physical) and those who chose any other reasons were coded into group two (non-physical; see Table 2). All physical reasons were coded into group one because it was impossible to pick and choose which qualitative responses meant that a participant was more focused on physical appearance, body shape, weight, and so forth than others. Therefore, to avoid reading into what a participant meant, all physically related reasons were coded into group one. It was also reasoned that those who are highly cued into physical appearance would cognitively focus in on physical aspects of their role model, no matter what those were. There were 33 coded reasons for choosing a specific person as a role model. Forty-two of the 159 participants recorded at least one physical reason for choosing a specific person as their role model (see Table 2).
<table>
<thead>
<tr>
<th>Physical reasons (Group 1)</th>
<th>Count</th>
<th>Examples of non-physical reasons (Group 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. physically attractive</td>
<td>34</td>
<td>1. caring, kind, understanding, nice, loving...</td>
</tr>
<tr>
<td>beautiful, pretty, cute</td>
<td></td>
<td>talented, has many strengths</td>
</tr>
<tr>
<td>2. skinny, thin, good body</td>
<td>22</td>
<td>2. giving, charitable, helps others, volunteers</td>
</tr>
<tr>
<td>3. works out</td>
<td>01</td>
<td>3. successful, good at what she does, accomplished</td>
</tr>
<tr>
<td>4. doesn’t have to be thin,</td>
<td>05</td>
<td>4. intelligent, wise</td>
</tr>
<tr>
<td>doesn’t care about how</td>
<td></td>
<td>5. personality</td>
</tr>
<tr>
<td>she looks</td>
<td></td>
<td>6. motivating, uplifting, influential, good example, teaches</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. rich, makes good money</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. religious, spiritual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. strong, inner strength, resilient</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. happy with self / high self-esteem</td>
</tr>
</tbody>
</table>

Note. For a complete list of reasons along with the number of participants who chose a particular response, see Appendix I.

**Hypothesis 1**

The first hypothesis states that there is no relationship between the type of role model chosen by adolescent females and body image. For comparisons, t tests were used to equate the types of role models chosen (physical role models vs. non-physical role models) with the body image measures (the FRS and the MBSRQ). Whether one chose role models based upon physical or non-physical reasons, the mean ideal figure chosen was number three out of the nine figures on the Figure Rating Scale (physical, mean = 2.95; non-physical, mean = 2.92, see Table 3). Statistically significant differences appeared between groups when participants marked the figure that best represented how they thought they looked, with the physical group choosing heavier figures than the non-physical group. The differences between groups were even greater when participants marked the figure that best represented how they felt they looked. Even though both groups had higher means on the think figure and even higher means on the feel figure, the statistically significant differences between the groups suggest that those in the physical group...
both thought, and to an even greater degree, felt that they were larger than those in the non-physical group (see Table 3).

Although the mean figure chosen by the participants in each of the categories (ideal, think, feel) is interesting, a score is usually obtained by subtracting the think figure from the ideal figure. Larger discrepancies indicate greater body image disturbance. Thompson and Altabe (1991) added the feel component to the FRS to assess both cognitive and affective responses. They obtained similar results as those in this study, in that the feel minus ideal had greater discrepancy scores than the think minus ideal and called for future research to distinguish the cognitive and affective parts of body image. Statistically significant differences appeared between groups on the think-minus-ideal and feel-minus-ideal discrepancies, although not on the feel-minus-think scores.

The MBSRQ, another measure of body image, was also used in this study. Statistical significance was reached on the overweight preoccupation subscale only (t = 3.20, p < .01; see Table 3) indicating that statistically significant differences existed between the two groups on the assessment of “fat anxiety, weight vigilance, dieting, and eating restraint” (Cash, 1994, p. 1). It is important to note, however, that group mean scores on all five of the subscales were higher or lower for the physical versus non-physical group, indicating greater body image disturbance in those who were in the physical group on all subscales, although not statistically significantly so (see Table 3). The appearance evaluation and body-areas satisfaction subscales are two similar scales which measure satisfaction with appearance. Mean scores on both of these subscales for the physical group were only minutely lower than those in the non-physical group. On the subscales of appearance orientation (t = 1.51) and self-classified weight (t = 1.55), the physical group scored higher with greater discrepancy between group mean scores. Although mixed results were obtained in the statistical analysis of the data, hypothesis 1 was rejected on the basis that there were clear statistically significant differences between some forms of body image and
Table 3

Means, Standard Deviations, and t-Test Results Depicting the Relationship Between Type of Role Model Chosen and Body Image

<table>
<thead>
<tr>
<th>Item</th>
<th>Group 1</th>
<th>Group 2</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical (n = 42)</td>
<td>Non-physical (n = 117)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>SD</td>
<td>$\bar{X}$</td>
</tr>
<tr>
<td><strong>Figure Rating Scale</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My ideal figure</td>
<td>2.95</td>
<td>.91</td>
<td>2.92</td>
</tr>
<tr>
<td>How I think I look figure</td>
<td>4.10</td>
<td>1.48</td>
<td>3.58</td>
</tr>
<tr>
<td>How I feel I look figure</td>
<td>4.76</td>
<td>1.74</td>
<td>4.03</td>
</tr>
<tr>
<td>Think minus ideal discrepancy</td>
<td>1.14</td>
<td>1.30</td>
<td>.66</td>
</tr>
<tr>
<td>Feel minus ideal discrepancy</td>
<td>1.81</td>
<td>1.60</td>
<td>1.11</td>
</tr>
<tr>
<td>Feel minus think discrepancy</td>
<td>.67</td>
<td>1.00</td>
<td>.45</td>
</tr>
<tr>
<td><strong>MBSRQ Subscales</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance evaluation</td>
<td>3.34</td>
<td>.75</td>
<td>3.36</td>
</tr>
<tr>
<td>Appearance orientation</td>
<td>3.87</td>
<td>.49</td>
<td>3.72</td>
</tr>
<tr>
<td>Body-areas satisfaction</td>
<td>3.80</td>
<td>.66</td>
<td>3.85</td>
</tr>
<tr>
<td>Overweight preoccupation</td>
<td>3.15</td>
<td>.96</td>
<td>2.61</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>3.27</td>
<td>.52</td>
<td>3.11</td>
</tr>
</tbody>
</table>

*Two-tailed tests of significance, $p < .05$

** $p < .01$

type of female role model chosen (physical vs. non-physical).

Hypothesis 2

There is no relationship between type of role model chosen and patterns of eating disordered behaviors. As Table 4 shows, no significant two-tailed t tests were obtained at the $p < .05$ or $p < .01$ levels to show statistically significant differences between physical and non-physical groups in relation to eating disordered behaviors. The Eating Attitudes Test (EAT-26) is usually reported only as a total EAT-26 score with scores $\geq 20$ in nonclinical samples indicating abnormal
Table 4

Means, Standard Deviations, and t-Test Results Depicting the Relationship Between Type of Role Model Chosen and Risk for Eating Disorders

<table>
<thead>
<tr>
<th>Item</th>
<th>Group 1 (n = 42)</th>
<th>Group 2 (n = 117)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>Physical</td>
<td>Non-physical</td>
</tr>
<tr>
<td>Diet</td>
<td>8.95 5.96</td>
<td>7.44 5.57</td>
</tr>
<tr>
<td>Bulimia &amp; food preoccupation</td>
<td>2.21 2.41</td>
<td>1.85 1.99</td>
</tr>
<tr>
<td>oral control</td>
<td>2.52 2.31</td>
<td>2.13 2.17</td>
</tr>
<tr>
<td>Total EAT-26 score</td>
<td>13.69 8.83</td>
<td>11.42 7.16</td>
</tr>
</tbody>
</table>

eating patterns, that one may be at risk of, or have an eating disorder. Given that the total EAT-26 scores between the physical and non-physical groups did not yield statistically significant differences, Hypothesis 2 was retained.

Hypothesis 3

There is no relationship between level of self-esteem and type of role model chosen.

Differences were virtually nonexistent between the variables of self-esteem and role model (physical group, mean = 29.67, SD = 4.88; non-physical group, mean = 29.89, SD = 5.84; t = and -.22). Given that no statistically significant differences were obtained between level of self-esteem type of role model chosen, Hypothesis 3 was retained.

Hypothesis 4

There is no relationship between age of subject and type of female role model chosen.
Table 5

Crosstabulation of Age Group (13-15 vs. 18-23) by Role Model Group (Physical vs. Non-Physical) and Pearson Chi-Square Value

<table>
<thead>
<tr>
<th>Age</th>
<th>Type of Female Role Model</th>
<th>Group 1 Physical (n = 42)</th>
<th>Group 2 Non-physical (n = 117)</th>
<th>Pearson chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Count</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td>13-15</td>
<td>32</td>
<td>32%</td>
<td>68</td>
</tr>
<tr>
<td>Group 2</td>
<td>18-23</td>
<td>10</td>
<td>17%</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>42</td>
<td>26%</td>
<td>117</td>
</tr>
</tbody>
</table>

*p < .05 (two-tailed)

models compared to only 17% of female university students ages 18-23 (see Table 5). Given the statistically significant differences between age of participant and type of role model selected (see Table 5), Hypothesis 4 was rejected. There is a relationship between the age of a female participant and the type of role model selected, with females in their early teens (ages 13-15) statistically significantly more likely to choose role models based upon physical characteristics than older females (ages 18-23).

Hypothesis 5

There is no relationship between level of body image and eating disorders. All measures of body image disturbance correlated statistically significantly with scores on the EAT-26 measure of risk for eating disorders, with exception of the MBSRQ subscale self-classified weight (p = .085; see Table 6). All correlations were in the anticipated direction and ranged from negligible to
high (-.37 to .75) with the two highest correlations obtained between the subscale of overweight preoccupation and the EAT-26 diet subscale ($r = .75$, 56% shared variance) as well as with the total EAT-26 score ($r = .68$, 46% shared variance; see Table 6). Interestingly, there was a statistically significant relationship between choosing a smaller figure as an ideal and higher scores on the EAT-26 with the greatest significance showing up in the oral control subscale ($r = -.28$, 8% shared variance). All other correlations with the EAT-26 were strongest on the diet subscale (except for the one asking participants to mark their ideal figure).

The diet subscale yielded the highest correlations with body image of all four EAT-26 categories while the bulimia and food preoccupation subscale obtained no statistically significant correlations with the measures of body image. Females who chose larger figures depicting how they thought and felt they looked correlated statistically significantly with high EAT-26 scores as did the discrepancy scores. Also, less satisfaction with appearance and parts of their bodies, high investment in appearance, and preoccupation with or feeling anxious about weight were statistically significantly correlated with a risk for eating disorders. Given that six out of the seven correlations between the measures of body image and total EAT-26 scores yielded statistically significant relationships, Hypothesis 5 was rejected. There is a relationship between level of body image and risk for eating disorders.

Hypothesis 6

There is no relationship between body image and level of self-esteem. All measures of body image disturbance correlated statistically significantly with scores on the RSES at the $p < .05$ and $p < .01$ levels, indicating a relationship with self-esteem (see Table 6). Pearson correlations were mostly moderate, ranging from $r = -.37$ to $r = .56$. Thompson and Altabe (1991) obtained similar results when comparing RSES scores with Think-minus-Ideal ($r = -.20$), Feel-minus-Ideal ($r = -.30$), and Feel-minus-Think ($r = -.24$) discrepancy scores from the Figure Rating Scale.
Table 6

Pearson Correlations Between Measures of Body Image (FRS, MBSRQ), Risk for Eating Disorders (EAT-26 Scores), and Self-Esteem (RSES)

<table>
<thead>
<tr>
<th>Body image measures</th>
<th>Eating Attitudes Test (EAT-26)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diet</td>
<td>Bulimia &amp; Food Pre</td>
</tr>
<tr>
<td>Figure Rating Scale (FRS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideal figure selected</td>
<td>-.09</td>
<td>-.05</td>
</tr>
<tr>
<td>How I think I look</td>
<td>.25**</td>
<td>.01</td>
</tr>
<tr>
<td>How I feel I look</td>
<td>.34**</td>
<td>-.00</td>
</tr>
<tr>
<td>Think-minus-Ideal Disc.</td>
<td>.35**</td>
<td>.04</td>
</tr>
<tr>
<td>Feel-minus-Ideal Disc.</td>
<td>.41**</td>
<td>.02</td>
</tr>
<tr>
<td>Feel-minus-Think Disc.</td>
<td>.21**</td>
<td>-.02</td>
</tr>
<tr>
<td>MBSRQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance evaluation</td>
<td>-.29**</td>
<td>.07</td>
</tr>
<tr>
<td>Appearance orientation</td>
<td>.33**</td>
<td>-.09</td>
</tr>
<tr>
<td>Body areas satisfaction</td>
<td>-.37**</td>
<td>.02</td>
</tr>
<tr>
<td>Overweight preoccupation</td>
<td>.75**</td>
<td>.09</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>.24**</td>
<td>-.04</td>
</tr>
</tbody>
</table>

*p < .05 (two-tailed)

**p < .01 (two-tailed)

Surprisingly, in this particular comparison, the body-areas satisfaction subscale had the highest correlation sharing 31% of the variance. The subscale similar to the body-areas satisfaction subscale, appearance evaluation, had the next highest correlation followed by the self-classified weight subscale. Given that all eight of the comparisons yielded statistically significant correlations, Hypothesis 6 was rejected. There is a relationship between body image and self-esteem.

Hypothesis 7

There is no relationship between body image and age of participant (13-15 vs. 18-23).

When measures of body image were analyzed using t tests with age of participant, no statistically significant differences were obtained on any of the 11 comparisons (see Table 7). Yet, when age and type of role model chosen were compared, the younger females were almost twice as likely to
choose role models based upon physical characteristics. Also, when participants were grouped based upon what type of role model they chose, statistically significant results were obtained on the weight/shape related aspects of body image (FRS, overweight preoccupation subscale; see Table 3). Given that none of the comparisons yielded statistically significant differences, Hypothesis 7 was retained. There is no relationship between body image and age of participant.

Table 7
Means, Standard Deviations, and t-Test Results Depicting the Relationship Between Body Image and Age of Participant

<table>
<thead>
<tr>
<th>Age of Participant</th>
<th>Group 1 Ages 13 - 15 (n = 100)</th>
<th>Group 2 Ages 18 - 23 (n = 59)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>X</td>
<td>SD</td>
</tr>
<tr>
<td>Figure Rating Scale</td>
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<td></td>
</tr>
<tr>
<td>My ideal figure</td>
<td>2.95</td>
<td>.97</td>
</tr>
<tr>
<td>How I think I look figure</td>
<td>3.75</td>
<td>1.51</td>
</tr>
<tr>
<td>How I feel I look figure</td>
<td>4.27</td>
<td>1.69</td>
</tr>
<tr>
<td>Think-minus-ideal discrepancy</td>
<td>.80</td>
<td>1.36</td>
</tr>
<tr>
<td>Feel-minus-ideal discrepancy</td>
<td>1.32</td>
<td>1.61</td>
</tr>
<tr>
<td>Feel-minus-think discrepancy</td>
<td>.52</td>
<td>.94</td>
</tr>
<tr>
<td>MBSRQ Subscales</td>
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<td></td>
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<tr>
<td>Appearance evaluation</td>
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<td>.75</td>
</tr>
<tr>
<td>Appearance orientation</td>
<td>3.77</td>
<td>.59</td>
</tr>
<tr>
<td>Body-areas satisfaction</td>
<td>3.87</td>
<td>.76</td>
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<tr>
<td>Overweight preoccupation</td>
<td>2.70</td>
<td>.98</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>3.17</td>
<td>.61</td>
</tr>
</tbody>
</table>
CHAPTER V
SUMMARY AND DISCUSSION

Summary of Findings

Four of the seven null hypotheses in this study were rejected after reviewing statistical analyses which showed statistical significance at, as a minimum, the $p < .05$ level. Two of the four hypotheses directly addressing role models were rejected, the primary research question being one of those two. Following is a summary and discussion of each hypothesis in this study.

Hypothesis 1

There is no relationship between the type of role model chosen by adolescent females and body image. Mixed results were obtained in the statistical analysis of the data regarding this hypothesis. The hypothesis was rejected, however, on the basis that there were clear, statistically significant differences on some measures of body image when those who chose role models based upon physical characteristics and those who chose them based upon other characteristics were compared. In view of the fact that more than half of the body image measures included in this study were not statistically significantly related to the type of role model that a participant selected (five of the eight), this conclusion should be regarded with caution. Since body image has been found to be such a complex and multidimensional construct, two measures of body image were used in this study to look for differences in response to more than one measure. The FRS, a one-dimensional measure of body image, was used as an evaluative, attitudinal measure of subjective cognitive and affective body image disturbance. This is a whole body visual scale consisting only of nine female figures which increase incrementally in size/weight. Changes in weight and shape are the only concepts addressed. The MBSRQ was used to assess a variety of self-attitudes and behaviors concerning only the aesthetic component of participants appearance.
and physical bodies. Statistical significance was attained for two of the three comparisons using the FRS, while only one of the five subscales from the MBSRQ reached statistical significance (see Table 3), possibly indicating what was initially predicted, the probability that one measure of body image cannot or would not catch the entire construct of body image.

"Body image is a multidimensional concept which has been operationalized in different ways. In anorexia nervosa, body-image disturbances have been defined as an overestimation of one's own size, preference for a 'thin' ideal image, and negative attitudes towards one's body" (Garner & Garfinkel, cited in Garner et al., 1982, p. 872). To address the problem of multidimensionality, Garner et al. (1982) calculated a composite body image score by using an assemblage of body image measures. They found that the body image composite score better predicted total EAT-26 scores than singular variables of body image. Problems with measuring the construct of body image come not only from its multidimensionality and malleability, but also with the diverse array of measures and theoretical ideations, including lack of common terms, language, and definitions, across the literature concerning this construct. Cash and Deagle (1997) listed some methodological problems in measuring and drawing conclusions about body image. Included in this list were "the possible effects of actual body size, instructions, mood states, and other contextual events on body-size appraisals [and] the reliance on a single assessment technique" (p. 109).

In this study two different measures of body image were used and differences were detected between the two measures with this particular sample. It appears that shape and/or weight-related aspects of body image (FRS and overweight preoccupation subscale) differed statistically significantly between groups while the more general-appearance related and body-site-specific measures of body image produced no statistically significant differences. There was one subscale, self-classified weight, which addressed self-perceptions of weight. However, in looking at this scale, how it is scored, and the lack of information it actually provides, this
researcher would not include it in future studies. When this subscale was compared to the two role model groups, statistical significance was not attained, although it did have the next highest t test following those that were statistically significant ($t = 1.55$, $p = .12$).

The self-classified weight subscale consists of two items, "I think I am" and "From looking at me, most other people would think I am," with a range of 1 to 5 from very underweight to very overweight. However, the two items in this subscale are summed and divided by 2, which gives the mean score for an individual. Yet, for example, those who answer "4" to both items have a higher average score than someone who answers "4" to the first item and "3" to the second item. Also an individual who answers item one as "4" and item two as "2" has the same score as someone who answers both items as a "3" which leaves out what could be important and relevant information. It may be that females with greater body image disturbance are more critical or irrational about themselves than they perceive the outside world to be, and rate themselves with greater affect and subjectively on the first item and less so on the second item.

When these two items were examined separately as an exploratory analysis, statistical significance was obtained when the "I think I am" item was compared to the type of role model that was chosen (physical group mean = 3.60; non-physical group mean = 3.22; $t = 3.14$; $p = .002$). It is interesting to note that those who chose physical role models thought they were statistically significantly larger than those who chose non-physical role models, as with the FRS, yet when asked how they thought other people saw them, their mean response was slightly smaller than that of group two, although not statistically significantly so (physical group mean = 2.95; non-physical group mean = 2.99; $t = -.30$; $p = .76$).

If the self-classified weight subscale is used the way it was designed to be used, an objective measure of weight and height needs to be part of the method in order to obtain any relevant information. This study did not obtain weight and height information from the participants,
which needs to be further discussed since the lack of this important information limits and presents substantial weaknesses into the findings for hypothesis one.

As pointed out earlier, it appears that in this study only weight and/or shape-related aspects of body image were found to be statistically significantly related to the type of role model that one chose. However, without actual measures of height and weight it is impossible to know if participants in group one (physical role models) actually had a higher average bodyweight or if there was a true discrepancy between actual weight and their subjective responses (compared to group two, those who chose non-physical role models). In this study, the mean figure selected as an ideal on the FRS was the same for both groups, which makes sense due to the fact that the majority of participants were U.S. born, Anglo Americans, sharing an aspect of culture regarding physical beauty and women.

Therefore, if heavier females were more likely to choose physical role models than other females, their discrepancy scores may have been larger. Also, both groups felt larger than they thought they were, with group one (physical role models) feeling statistically significantly larger than group two (non-physical role models). Again, with the same ideal figure, if group one was in fact heavier on average than group two, and both groups felt larger than they thought they were, then group one would again have larger discrepancy scores. The Feel-minus-Think discrepancy score from the FRS did not help to refute the idea that group one (physical role models) could indeed have been heavier, on average, than group two (non-physical role models) participants. The discrepancy score was not statistically significantly different when the two groups were compared, although group one (physical) did have a greater discrepancy score than group two (physical, mean = .67, non-physical, mean = .45, p = .18; see Table 3).

The other measure that attained statistical significance was the overweight preoccupation subscale, which was the only subscale on the MBSRQ that attained statistical significance. It is possible that if females who chose the physical role models were heavier that their scores on this
scale would be higher than those in group two. Items in this subscale include “I constantly worry about being or becoming fat,” “I am on a weight-loss diet,” “I am very conscious of even small changes in my weight,” and “I have tried to lose weight by fasting or going on crash diets.”

Although there were some statistically significant differences between those who chose role models based upon physical characteristics and those who did not, it is not certain whether some types of body image disturbance are related to the reasons one has for choosing a specific role model or that the differences between groups are mediated by actual bodyweight. It is plausible that differences existed because group one was on average heavier than group two. Not obtaining actual bodyweight and height information certainly limits what information can be drawn from the results of these data and warrants caution concerning the rejection of hypothesis one. It was rejected, but only because differences did exist between groups. This is not to say that females who are preoccupied with weight and/or shape issues do not tend to pick role models, compare themselves to, or use them as a reference group, based upon more physical characteristics than other females.

It is interesting that on the self-classified weight subscale that group one thought they were heavier (mean = 3.60, between normal and slightly overweight) than group two, but judged that others saw them as similar to group two (just below normal weight; see Table 8). Davis et al. (2000), in their conclusions, wrote that “[p]erhaps the crucial factor determining dysfunctional attitudes is the discrepancy between others’ and one’s own judgment of personal attractiveness” (p. 72). Also, if group one was larger/heavier than group two, on average, it seems theoretically sound to expect that their scores would be statistically significantly different on such measures as appearance evaluation, where high scores equal greater satisfaction with aspects of one’s appearance, yet the scores between groups are almost identical (group one mean = 3.34, group two mean = 3.36, just higher than “neither satisfied nor dissatisfied”). Also, mean scores on the
nine items in the body-areas satisfaction subscale for both groups approach the score of 4, "mostly satisfied," with group one having lower average scores than group two (see Table 3).

Rierdan and Koff (1997) conducted a study which provides a good example, although not comparison, of weight-related aspects of body image along with the "biological variable of body fat" (1997, p. 621). They studied weight-related aspects of body image and depressive symptomatology in adolescent girls and obtained BMI scores as objective measures of body fat and weight. "The BMI is highly correlated with body fat, and is an appropriate index for adolescents, whose fat and height spurt may be more or less dysynchronous" (1997, p. 619). They found that those with higher BMI scores were more likely to underreport their weight but still classified themselves as overweight. Also, greater BMI scores were statistically significantly related to less weight satisfaction and greater weight concerns. Thus, these researchers saw that is was "essential to control for body mass in testing the hypothesis that the psychological variable [emphasis added] of weight-related body image is associated with depressive symptoms" (p. 620).

When the variables of body image and depression were tested, results made it clear that "it is the psychological variable of body image, not the biological variable of body fat, which is significantly predictive of levels of depressive symptomatology" (1997, p. 621).

Finally, one of the research questions concerning role models and body image asked whether consciously selected role models, or models in general, appear to have an impact upon low body image, eating disordered behaviors, and self-esteem. Results appear to indicate that although there are age differences in choice of role model, and some shape and/or weight-related differences in body image satisfaction based upon the type of role model selected, the majority of girls do not consciously identify physical characteristics when writing reasons for choosing a role model. At the same time, however, it was clearly shown that females as a whole tend to collectively understand what the ideal female body in their society looks like, shown by the common body figure chosen (figure three on the FRS) and identify it as their ideal. Haag (1999)
appears to have found similar results. "Among girls, overt [emphasis added] discussions of the cultural ideals of female adolescence are not especially common. While many talk about the difficulty of meeting socially prescribed ideals, few directly assess the validity of those ideals" (p. 9).

Results from this study tend to support the belief that models in general have a greater impact upon body image, than consciously selected role models. However, it may also be that females who do have greater body image disturbance have indeed selected role models based initially upon how well they fit social beauty ideals but later find other characteristics that they like or admire about the role model to replace that initial attraction. Bandura (1977) pointed out the importance of prevalence, incentives, attraction, and similarity for social learning. In our society the prevalence of female beauty messages comes from those both proximal to and distant from us, and through our heavy use of media in all its various forms. The rewards or incentives for meeting the requirements of the socioculturally defined "beautiful" female are obvious.

It appears reasonable that many females (especially younger ones) may first pick up on the physical attractiveness of a potential female model and by means of that initial attraction may further key into what they share in common with, like, or admire about that person. Following the initial attraction, and perceived similarity, including the perception that the potential model fits with ones own ideals concerning how one wants to be, the model becomes a role model, that is, someone that the individual can look to as a source of information concerning her ideas of what it means to be a woman at a certain point in time.

Hypothesis 2

There is no relationship between type of female role model chosen by adolescent females and patterns of eating disturbance associated with eating disorders. No statistically significant results were obtained in the comparison of role model type and eating disturbance at the p < .05
and $p < .01$ levels. However, nearly twice as many participants in the physical role model group (21%) were at risk for an eating disorder when compared to those in the non-physical group (13%). Scores on all of the subscales were higher for those who chose physical role models and for the total EAT-26 score. Those who chose physical role models scored an average of 2.27 points higher than those who chose role models based upon other characteristics. One standard deviation puts participants in the at risk range. Wichstrom (1995) found that adolescent females embracing icons representative of the current feminine standard of attractiveness was related to eating disturbances.

Causes for eating disorders are complex and intertwined.

Eating disorders arise from a combination of long-standing psychological, interpersonal, and social conditions. Feelings of inadequacy, depression, anxiety, and loneliness, as well as troubled family and personal relationships, may contribute to the development of an eating disorder. Our culture, with its unrelenting idealization of thinness and the "perfect body," is often a contributing factor. (EDAP, 1998, online)

It is within this "contributing factor" that the sociocultural variable of role models becomes relevant. This study attempted to examine a potential relationship between a specific sociocultural variable, (role models, and reasons for choosing them) and eating disordered behaviors.

Women born in the 1960s and 1970s have been exposed to the current standard of attractiveness their entire lives (Silverstein, Petersen, & Perdue, 1986). So, even though both groups in this study identified a common cultural ideal on the FRS, hypothesis two was tested based upon the idea that it may be that those who consciously and cognitively narrow reasons for choosing a specific role model, someone they want to be like down to physical aspects, may have greater weight concerns, and therefore be at greater risk for eating disordered behavior.
Taylor et al. (1998) conducted a study to examine what factors influence excessive weight concerns that have been found to be a risk factor in the etiology of eating disorders. They found that among females in the sixth through eighth grades, "the importance that peers place on weight and eating...followed by confidence, BMI, trying to look like girls/women on TV and in magazines, and being teased about weight" were most strongly related to weight concerns (p. 31). Three of the five predictors are sociocultural variables. "Trying to look like girls/women on TV and in magazines" suggests that those with excessive weight concerns attempt to model those who have been selected as cultural ideals, and taking it one step further, may even select them as role models based upon their physical characteristics.

Hypothesis two in this study, however, once tested did not reach statistical significance, which may not be too surprising due to the complexity of eating disorders and the fact that a wide range of sociocultural factors can play a part in contributing to eating disordered behavior (see Harrison, 1997; Levine, Smolak, & Hayden, 1994; Nagel & Jones, 1992). Based on this, it is actually astonishing that such differences did show up between groups on one variable of many possible sociocultural influences.

Hypothesis 3

There is no relationship between level of self-esteem and type of role model chosen. There were virtually no differences in self-esteem between type of role model (physical vs. non-physical) chosen. This hypothesis was initially tested in response to findings from Duck (1990) concerning self-esteem and role models in Australian children in the fifth through ninth grades. Children who scored as having lower self-esteem also "chose more unrealistic or fantastic characters than children with high self-esteem" (p. 24). When gender was used in Duck's analyses, statistical significance was achieved for boys and not for girls. Also, Cheng (1997), in examining idolatry among adolescents in Hong Kong, found that girls were more likely
than boys to belong to a fan club and fan club members scored statistically significantly lower on self-esteem than non club members.

No studies were found by the researcher of this study which dealt with the exact variables being examined. Therefore, the formulated hypothesis came from the idea that perhaps those who chose role models based upon a culturally emphasized attribute such as physical characteristics may be those who are keying in on one very loud sociocultural message due to lack of other positive messages coming from those around them. However, when self-esteem was compared to body image of all participants, statistical significance was reached on all measures of body image, with greater body image disturbance and eating disordered behaviors related to lower self-esteem. It appears that there is a distinction between the desire to look like cultural ideals and consciously wanting to be like them or choose them as role models because of how they look. It seems that whom one selects as a role model does not mediate the relationship between body image and self-esteem or eating disordered behavior and self-esteem. In regard to these variables, it does not appear to matter whom one chooses to emulate or look up to, but instead how females think and feel about themselves, their bodies included as part of the self.

The current cultural ideal of female thinness has been around long before any of the participants were born and could very well have spanned the entire lives of many of the participants' own mothers. Therefore, whether consciously or unconsciously identified, many females are choosing to emulate other females based upon physical characteristics, which is shown in this study by the selection of a common ideal figure on the FRS. It was apparent that most females agreed upon the ideal body of a woman in this culture. Indeed, the figure that is most presentational of female success, beauty, lovability, prestige, and power. It may be that it is just so "normal," or "expected" that there is no conscious cognitive categorization for it. It may be that physical attractiveness is sort of a prerequisite for being chosen as a role model by many young females and then other characteristics of the individual are considered so that
unconsciously the role model was selected due to physical reasons. The initial attraction for many females could be that the role model fit the "picture" of what a role model should be, beginning with cultural beauty ideals and working inward from there.

Other possibilities include the fact that this study categorized all participants who listed one or more physically based reasons for choosing a role model in the physical group and all others in the non-physical group. Those who only listed one physical reason could have had up to two more reasons that were not physically related. Exploratory statistical analyses showed that indeed, those who listed two or more physical reasons (n = 16, mean self-esteem score = 27.5, SD = 4.94) for choosing a role model did have statistically significantly lower self-esteem than those who listed only one physical reason (n = 26, mean self-esteem score = 31, SD = 4.43; t = 2.38; p = .02).

Hypothesis 4

There is no relationship between age of subject and type of female role model chosen.

Seventeen percent of the university participants selected role models based upon physical characteristics compared to almost double that at the freshman center (32%), resulting in statistically significant differences between the two groups. Although looks remain important to females and body image disturbance remains with age (Cash & Henry, 1995), the written reasons that role models are selected differ with age. This may be due to cognitive development, identity development, and greater life experience, which allow and promote more broad attitudes, complexities, and ideas concerning what it means to be human, and getting down to what it is that one wants to be, aside from beautiful.

Hypothesis 5

There is no relationship between level of body image and eating disorders. Participants in this study who had greater body image disturbance on two measures of body image were
statistically significantly more likely to have high scores on the EAT-26 which screens for behaviors and attitudes typical of those who have clinical eating disorders. The National Institute of Mental Health (cited in Holzgang, 1998) estimates that 15% of young women in the United States who are not diagnosed with a clinical eating disorder (i.e., anorexia, bulimia) engage in eating disordered behavior (subclinical eating disorders). The National Association of Anorexia Nervosa and Associated Disorders (ANAD, 2000c) estimates that at least 8 million people suffer from eating disorders (90% of those afflicted are female).

ANAD conducted a study in 1990 with seniors from 20 high schools in 18 states, male and female. Results indicated that 11% of the participants "suffer from either anorexia nervosa or bulimia" (2000b, online). The majority of this 11% were females although males composed a significant number. This study was a replication of one conducted by this same association in 1983. Results indicated a small increase in the eating disorders examined. Also important to note is the fact that this study didn't examine prepubertal or early adolescent females, populations in which eating disorders are commonly found (ANAD, 2000b). The American Psychiatric Association (1994) estimates that among the general population, 0.5-3% meet the criteria for a clinical eating disorder. However, it has been reported that the percentage is somewhat higher within young female populations (Collins et al., 1982; Harrison, 1997; Harvard Mental Health Letter, 1997), although the percentage varies widely across studies.

Garner (1997) wrote that "[s]urveys of adolescents or young adult women indicate that about 15% score at or above 20 on the EAT-26. Interviews of those who score below 20 on the EAT-26 show that the test produces very few false negatives" (p. 175). In this study, a total of 24 participants (15%) out of the total sample (N = 159) had a score of ≥ 20 on the EAT-26, which "identifies approximately 15% of college and high school females, 10 to 40% of whom may be suspected as having clinically significant eating disorders" (Garner 1997, p. 177). In this sample alone, one to almost seven young females can then be thought of as having a full blown eating
disorder, a disorder which is estimated to take the lives of up to 6% of those with clinical cases (ANAD, 2000a).

Adolescent body concerns and dieting attempts are disturbing because they are risk factors for later development of eating disorder-like syndromes and even at subclinical levels they are associated with depression, low self-esteem, and anxiety. Extreme behaviors such as fasting, vomiting, and binge eating are not uncommon and can be associated with unhealthy physical, nutritional, and emotional effects. (Wertheim et al., 1997, p. 345)

Factors that separate those who develop serious eating disorders from those who do not are a current topic in research on body image and eating disorders (see Garner et al., 1984; Harrison, 1997; Nagel & Jones, 1992; Taylor et al., 1998; Wertheim et al., 1997). In the present study, all measures of body image (aside from the self-classified weight subscale) were statistically significantly related to the total EAT-26 score. Those who scored higher on the EAT-26 were likely to have greater body image disturbance. Eating behaviors were not statistically significantly related to self-perceived weight classification ($r = .14$), which ranged from very underweight to very overweight, indicating that one’s perception of herself, whether small or large, did not predict eating disordered behaviors.

The largest correlation with the total EAT-26 score occurred with the overweight preoccupation subscale ($r = .68$). Past studies have shown that those with greater weight concerns are more likely to develop full or partial syndrome eating disorders (Killen et al., 1994, 1996). Research has shown body image dissatisfaction to be one of many risk factors in the development of these excessive weight concerns, which are, in turn, a risk factor for partial to full syndrome eating disorders (Attie & Brooks-Gunn, 1989; Bruch, 1973; Cooper & Fairburn, 1983; Taylor et al., 1998; Wadden et al., 1991).
Hypothesis 6

There is no relationship between body image and level of self-esteem. Both measures of body image were statistically significantly related to participants' score on the RSES, with the majority of correlations statistically significant at the $p < .01$ level (see Table 6). Those who evaluated their appearance higher, who were more satisfied with specific body areas, and those who classified themselves as being smaller had higher self-esteem. It is interesting that these are the three body image categories/subscales which, in comparison with other variables in this study, had the lowest correlations and $t$-scores (see Tables 3 and 6). Although the data analysis results of the ideal figure selected on the FRS are included in Table 6, it does not reflect a measure of body image. It is interesting, however, that it is the only comparison with self-esteem that was not statistically significant. This is most likely due to the fact that the majority of the sample picked the approximate same ideal figure, again reflecting the shared cultural knowledge concerning what is considered the socioculturally appropriate female body.

Many researchers have documented the relationship between self-esteem and eating disorders (see Button et al., 1996; Cooper & Fairburn, 1993; Garner et al., 1984; Geller, Johnston, & Maddsen, 1997; Geller et al., 1998). Button et al. (1996) used both the RSES and the EAT-26 and found self-esteem scores on the RSES to be predictive of EAT-26 scores, with high EAT-26 scores correlating with low self-esteem scores. Low self-esteem at time one was predictive of an increased risk for an eating disorder (higher EAT-26 scores) at time two, with the first test being administered to girls at ages 11-12 and again at age 15-16. Indeed, although the hypothesis was not tested in this study, those participants who scored $\geq 20$ on the EAT-26 had statistically significantly lower self-esteem scores (mean = 26.38) than those who scored $< 20$, mean = 30.44; $t(159) = -3.40$; two-tailed, $p = .001$.

In reviewing the literature on body image and self-esteem, findings are mixed. Using only a figure discrepancy measure to examine body image, Tiggemann and Wilson-Barrett (1998)
found that level of body dissatisfaction correlated statistically significantly with level of self-esteem for boys ($r = -.29$, $p < .01$) but not for girls ($r = .03$, $p > .05$) ages 7-12. Tiggemann (1992) also obtained comparative results on a sample of college women (see also Friedman & Brownell, 1995; Silberstein et al., 1988). "[T]his surprising result might somewhat paradoxically be a consequence of weight dissatisfaction being so prevalent among young women as to be normative, hence providing very little range on the variable" (Tiggemann & Wilson-Barrett, 1998, p. 87). However, Hill and Pallin (1998), in their study using 8-year-old participants, found that their results supported

the view that girls are drawn to weight control as a means of improving their self-worth (Hill, 1993). This reflects the relative importance of appearance and weight for the female population and the differences in the opportunities available to girls for achieving self-esteem compared with those available to boys (Harter, 1993; Striege-Moore, 1993; cited in Hill & Pallin, 1998, p. 411).

Cooke (1996) cited a study done by the Australian Institute of Sport which examined levels of self-confidence in 1,798 male and female athletes over a six year period. Findings indicated that at ages 13-14 both males and females had similar levels of self-confidence whereupon a drop occurred for both. However, the drop in female self-confidence was both quicker and greater than the drop experienced by the males.

For both sexes it [self-confidence] seems to bottom out or reach its lowest levels at around 19, 20, 21 years of age and then it bounces back out again, but interestingly the males actually end up higher than when they started, and the female athletes never reach the same level [as at 13 and 14] again. (p. 205)

Cooke (1998) stated that these results are similar to international findings. There are an array of possible explanations for such results, and twisted among the possibilities is the always looming importance of beauty for the female. "Women and girls are...consistently taught from an early age
that their self-worth is largely dependent on how they look" (Dittrich, 1998a, online). Many other studies have similarly found there to be a relationship between low self-esteem and body image disturbance (see Abrams, Allen, & Gray, 1993; Cooke, 1996; Noles, Cash, & Winstead, 1985; Peto, 1972; Silberstein et al., 1988).

The results obtained in this study on these variables are not surprising. It is believed that the variables of body dissatisfaction and self-esteem are clearly risk factors for the development of partial to full syndrome eating disorders. It is not clear if the variable of self-esteem functions on a continuum with eating disorders becoming more of a possibility with lower self-esteem. However, Button et al. (1996) found that, concerning eating disorders, "There is thus an eightfold increased risk for the lowest self-esteem group compared to those with higher self-esteem" (p. 197).

Is the prominence of dieting founded on the social value placed on physical appearance and reinforced by the pervasive anti-fat attitudes that are themselves redolent of racism (Crandell, 1994)? In this case, the associations between dieting awareness and poor self-image that are emerging in our daughters (but less so in our sons) should be considered a matter of concern and a reason for action (Hill & Pallin, 1998, p. 412).

Hypothesis 7

There is no relationship between body image and age of participant (13-15 vs. 18-23). Statistical analyses did not reflect any differences between age group and level of body image, which was theoretically expected due to the prevalence of body image disturbance among all age groups of females (Cash & Henry, 1995). Women up to the age of at least 40 have been exposed to the current ultrathin ideal. As this study showed, most females identify a similar cultural ideal, but think and feel larger than it, on average. It is not surprising, then, that body image
dissatisfaction would be prevalent among women of all ages, especially in light of the fact that the cultural ideal is much thinner than the average American woman. So thin, in fact, that less than 5% of the female population can naturally meet the expectation (Kilbourne, 1994).

Orenstein (1994) wrote that although there may be more messages concerning opportunities for success and achievement for girls than ever before, most girls know that their appearance still ranks at the top as their defining quality. Media and cultural messages support this notion by continuously equating the socially ideal body with such qualities as professional success (Silverstein & Perdue, 1988), self-control, strength, masculinity (Orenstein, 1994), and goodness and perfection (Brown & Gilligan, 1992).

Fredrickson and Roberts (1997, cited in Fredrickson et al., 1998), in their objectification theory, reason that in American culture, girls and women tend to see themselves through a veil of sexism, measuring their self-worth by evaluating their physical appearance against our culture’s sexually objectifying and unrealistic standards of beauty” (p. 269). So much so that their appearance can ascertain the way in which they are treated in their world which in turn can impact both social and economic opportunities in life. In other words, appearance can have a major impact upon the opportunities and outcomes that girls and women have in their lives, both in their present and future. It is believed that girls as young as, if not younger than, 8 years of age have clearly picked up on that sociocultural message (see Hill & Pallin, 1998).

Cash and Henry (1995) conducted a survey with 803 women ages 18-70 years old. Once again, we see the extent to which body dissatisfaction represents a “normative discontent” among women in our society... this national survey indicates that body-image concerns continue to be prevalent among American women. The findings offer little evidence that the recent economic, occupational, and political gains of women in the United States have brought improvements in their body images. (pp. 25-26)
About the Role Models

In this study, 343 responses for choosing a specific individual as a role model were coded into 33 categories. The largest percentage of responses (16%) that were clustered together included such characteristics as being a kind, caring, nice, loving, and understanding person. The second largest reason that participants listed for why they chose a specific person as a role model was that the person was physically attractive, beautiful, cute, or pretty (10% of responses). Other notable categories include successful, she is good at what she does, and accomplished (6.4%); personality (6.1%); skinny, thin, good body (5.8%); and happy, enjoys life (5.5%). Respondents listed a diverse and varied repertoire of reasons for choosing a specific person as their role model, which accounts for such low percentages of common reasons among participants as a group (see Appendix I).

Limitations

Adolescence is a time when major life choices can be made which may have serious implications, positive or negative, for a lifetime. The goal of this study was to add to the present knowledge concerning the variables of role modeling, body image, self-esteem, and eating disorders. This study was a correlational study that examined possible relationships between several specific variables out of innumerable variables. This study was not conducted to come to conclusions, but only to point out possible relationships, as well as to add to the body of research on body image and especially eating disorders among female adolescents.

Limitations of this study include the fact that the participants were predominantly White, middle class females from only one freshman center, and one university, chosen out of convenience, rather than randomly. The sample size is not very large, and females self-selected themselves to participate based upon extra credit in most instances, as well as out of interest.
Considering these limitations, the results of this study are not necessarily representative of and cannot be generalized to the overall population of adolescent females. Also, in the case of this study, females not only obtained parental consent to participate but also had to fill out the questionnaires at home. Therefore, answers may not have been confidential or entirely reflective due to the possibility of filling the questionnaire out with parents, siblings, or peers. Even on their own, some participants may have given socially desirable answers instead of answers that reflect themselves as honestly as possible.

The low reliability coefficients obtained on two of the subscales of the Eating Attitudes Test also warrant some caution. These were the oral control (alpha = .40) and bulimia and food preoccupation (alpha = .44) subscales and is discussed further in Chapter IV in the discussion of this measure (see page 69). However, to defend the use of this measure in this study, is the argument that even with the low reliability coefficients of the two subscales, statistical significance was either approached or obtained in the analyses of the data.

In the case of the use of body image measures, the lack of actual body weight and height for each participant made interpreting the results based upon the hypothesized relationship between type of role model chosen and body image a cloudy endeavor. It is impossible to know if differences between groups existed due to actual body weight or weight-related body image dissatisfaction. This was previously discussed in detail under hypothesis one, above.

**Recommendations for Future Research**

Due to the multidimensionality of the body image construct, future research on this topic does need to include more than one measure of body image. It appears preferable to use measures that are somewhat diverse, in that they measure different aspects of the body image construct. Also, actual weight and height of participants needs to be part of the measurement and data collection process, if possible, to aid in analyses and in interpreting the results.
More research on role models in adolescence is called for due to the lack of studies focusing on this topic. Modeling is one significant way by which humans learn, and certainly we look to those who we are most attracted to as role models who can have the power to impact choices and therefore lives. Future research might investigate those who listed physical reasons for choosing both a person within their family and outside of their family as a role model.

Responses in this study showed that just as many participants gave physical reasons for choosing a family member as a role model as they did for choosing role models outside of the family. Also, it would be beneficial to examine the number of physical reasons that a participant chooses in order to distinguish between females who list one, two, and three physical reasons for choosing a role model.

The introduction of a diverse array of positive role models would probably be of most value to those in our society who are at greatest risk for present and future problems such as eating disorders. In the case of eating disorders, the presentation of positive, diverse, clearer-cut role models could help those at risk identify with more concrete images of women, instead of the conflicting models that prolifically exist today. It is obvious that womanhood today is socioculturally defined the loudest at the extremes, which are really quite contrary. It seems that one of the few clear messages concerning womanhood is that concerning beauty, both in the past and at the present time, although how beauty is expressed changes with time. Along these lines, a call for more research on sex-role orientation among females and eating disorders is warranted.

It might be informative to make a closer examination of traditional, nontraditional, and mixed reasons listed by participants as to why they chose a particular female as their role model and compare these groups to scores on the eating disorder, body image, and self-esteem measures (see Nagel & Jones, 1992).

Clearly, low self-esteem is a major determinant of body dissatisfaction and eating disorders among female adolescents. The relationship between self-esteem and eating disorders
appears to be more empirically clear and supported than the relationship between self-esteem and body dissatisfaction. Questions such as how those with low self-esteem move from body image dissatisfaction to partial and full eating disorder syndromes need to be addressed since self-esteem could be a major source of prevention in the move from body image problems to eating disorders, as well as in the prevention of body image disturbance in the first place.

Some factors may protect girls who are otherwise at risk for developing eating disorders. From a social cognitive learning theory perspective, self-confidence may serve as an important protective factor (Bandura, 1986). High levels of social support may also serve as a protective factor. (cited in Taylor et al., 1998, pp. 32-33)

The role of the media needs to be further researched as well, due to the powerful national, even universal socializer that it can be. Media is a powerful socializer whose influence has been compared to the socialization influences of families and other people within an individual's close proximity (see Bandura, 1977). Those who do not have positive family or other social relations may then, quite possibly, be most at risk from the effects of media socialization.

Research concerning educational programs focusing on issues facing adolescent girls (i.e., body image, appearance, dieting, sexuality, self-esteem, media or consumer education) should also be a priority. Education can act as both a measure of prevention and treatment. Although all girls in general could benefit from such educational programs, it is those who are most at risk for moving into an eating disorder that would probably experience the greatest benefits. Studies such as these are beginning to show up in the literature (see O'Dea & Abraham, 2000; Springer, Winzelberg, Perkins, & Taylor, 1999). It is important to examine a variety of programs to see what types of educational programs have an impact, and to make sure that each program fits the age group to which it is directed.
Conclusions

As this study shows, females identify with resounding conformity to the ideal of feminine beauty. Yet, for most, these pieces of society do not show up in their cognitive responses to why they selected a certain person as their role model. Similar to findings in the distant and more present past, the largest percentages of responses in this study clearly fell in what can be considered traditionally important traits for females to possess (see Cooke, 1996; Duck, 1990; Miller & Reeves, 1976; Reeves & Miller, 1978; Wadden, 1991). This researcher strongly believes that our sociocultural environment offers conflicting messages concerning what it means to be a woman today. Girls today feel an immense pressure to meet the cultural female ideal, they comprehend what meeting those ideals can mean for them, but for the most part they do not see themselves as being able to change this social dilemma that they feel is impacting them, their identity.

Adolescence in 20th-century America has been, at its core, a struggle for identity. [One] applicant implores adults to resolve the contradictory messages she says she and her friends receive about femininity and give them "a clearer, more realistic definition of our general identity." Girls today "need a clear definition of girls or women," she says. "We are encouraged to be assertive through TV, magazines, and some adults, but we’re punished indirectly by the world when we do."

[The most important issue facing teen girls today is] "trying to find our identity in a male-oriented society". Typically, these girls imagine a culture that allows multiple scripts for girlhood. (Haag, 1999, pp.11-12)

There is no one precise way to define a female, male, African American, Latino, Jew, or other human being. However, when the most blatant messages range at either end of a spectrum, there can be nothing but conflict and confusion, especially among those females most
at risk. It appears that at this time these conflicting ideas of what it means to be a "woman" are engaged in a tug-of-war concerning what the sociocultural definition of feminine identity is. Passive, subservient and degrading, to ethereal perfection, to independent, intelligent, and assertive, these messages spring forth abundantly and resoundingly in the environment that girls call home. It is this author's belief at the end of this research project that eating disorders are on the rise not due simply to the current ultrathin feminine ideal. That in itself is part of the bigger problem. Global body dissatisfaction among women may be a symptom of our current social feminine ideals, and messages, while the epidemic rise in eating disorders could be the manifestation of the confusion that many females have concerning what it means to be female.

The outcome of presenting with an eating disorder was the end point of this study. Some risk factors for eating disorders include being born female, low self-esteem, an external locus of control, wanting to be acceptable to and seeking the approval of those outside of oneself, clearly perceiving all of the sociocultural messages about what female "is" or "should" be, and attempting to respond to those conflicting messages. Eating disorders are about perfection, making everyone happy, and confusion. They are a silent expression, a release, communication, for that which cannot be verbally expressed. For many it is about being embarrassed about being a woman; some cannot even say the word without blushing. How does one live as a "woman" in an environment where women are degraded, and subordinated, beneath a mask of "let's pretend" denial?

The truth is so buried in history that seeing clearly is difficult for anyone, male or female. It is difficult for anyone to speak about that which they do not consciously understand or have the cognitive links to express. It is not men who are going to find the solutions, certainly not in this case. It is up to women to help one another unravel the truth. They need to find the words inside of themselves, to speak, to break the silence. Women need to open up to each other, to men, with honesty, not with what they think they are supposed to be like, or what they think men want.
them to be like. Women need to feel as though they have the freedom to be the way they wish to be, without experiencing social disapproval by being themselves, that is, unique human beings.

Offering programs to girls, directed at the commonality of problems that girls face, offering a range of strong, healthy, realistic, varied, diverse female role models, educating parents, teachers, communities, and the boys their age, can make all the difference in the future generations of women and the attitudes that they have about themselves, and that males hold toward them as well. They can have a voice that is not buried, subordinated, ignored. Muffled voices of more than half of a population could resound loud, and clear.

Girls' awareness that the ideal script of girlhood is remote from their actual lives or personalities provokes some of the respondents to characterize society and the media as pervasive but disembodied "outside forces" that impact their lives, but that they are powerless to shape... [M]ost girls do not see themselves as agents within the society that, by their accounts, shapes gender roles. (Haag, 1999, pp. 10-11)

All girls deserve the chance to feel that they do have an impact and that as a collective body they can impact stereotypes, ideals, and messages which promote an unhealthy group of people, emotionally, physically, mentally, and spiritually. Women need to stand up and take responsibility for their part in this battle concerning feminine bodies and identities. It is time for women to define themselves instead of continuing to let the more powerful define them. Women can be any way, and anything that they like, but ideally it should be they who are doing the defining under the most clear of pretenses. This is something that we still do not have today.

It is through strong women role models, education focusing on awareness, and working collectively to solve problems common to women, that their voices will be heard and listened to as well as the voices of men currently are, and always have been. It is still far too common for the male voice to be the leading voice, the one that is listened to, and adhered to. Women have come a long way, but they are now at the crossroads and it is time to see clearly, make decisions, and
continue to move on. This is not something that only makes for a stronger generation of women but a stronger, more unified, peaceful, productive, healthy human race.

The ideal of strength and might - rather than skinniness, sexual allure, popularity, or beauty - reverberates through other responses as an alternative ideal for girlhood....

"We need to fight the battles we face and make it known that we will not sit back anymore".... "[I] want girls to be remembered as fighters and not those who slipped quietly away, because we are worth more than that, and when we realize it, we then will be sisters." (Adolescent responses in Haag, 1999, p. 12)
REFERENCES


APPENDICES
Appendix A

IRB Research Approval
MEMORANDUM

TO:           Randall Jones
             Tracy Funk

FROM:    True Rubal, IRB Administrator

SUBJECT: Female Adolescent Role Models and Body Image

February 25, 2000

The Institutional Review Board has reviewed your proposal and has granted approval.

In giving its approval, the IRB has determined that:

- [ ] There is no more than minimal risk to the subjects.
- [x] There is greater than minimal risk to the subjects.

This approval applies only to the proposal currently on file. Any change affecting human subjects must be approved by the Board prior to implementation. All approved proposals are subject to continuing review at least annually, which may include the examination of records connected with the project. Injuries or any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Institutional Review Board.

Prior to involving human subjects, properly executed informed consent must be obtained from each subject or from an authorized representative, and documentation of informed consent must be kept on file for at least three years after the project ends. Each subject must be furnished with a copy of the informed consent document for their personal records.
Appendix B
Cache County School District Approval
March 20, 2000

Tracy Funk
90 W 400 N
Wellsville, UT 84339

Dear Tracy:

Your proposal titled: "Female Adolescent Role Models and Body Image," has been approved by our screening committee. Thank you for meeting with the administrative team at South Cache 8-9 Center, to discuss the project.

Please let me know how I can be of further assistance.

Sincerely,

Stephen W. Zaslay, Jr.
Executive Director of Curriculum and Instruction
Appendix C

Complete Questionnaire Packet for Participants at the Freshman Center
Instructions

1. Parental Consent Must Be Obtained. A parent or guardian must read and sign the enclosed form. You, the participant in this study, must also read and sign the same enclosed form in the space provided on page 4.

2. Fill out the questionnaire. Read all of the instructions for each set of questions.

3. Put all materials (consent form signed by you and a parent/guardian and the completed questionnaire) back into the manila envelope provided.

4. Return the envelope to Ms. Farris at your school.

Thank You!
March 20, 2000

Informed Consent
Female Adolescent Body Image

Introduction/Purpose

Dr. Randall M. Jones, in the Department of Family and Human Development at Utah State University is conducting a research study to find out more about female adolescent body image. You have been asked to take part because you are enrolled in a Health or Science class at South Cache Middle School. There will be approximately 100 participants at this site. The purpose of this study is to conduct research on the subject of body image among adolescent females as well as their attitudes and experiences in regard to food and eating. We are interested in what adolescent girls think about their bodies and how their beliefs are related to other areas of their lives.

Procedures

If you agree to be in this study you will be expected to fill out a questionnaire at your home following the consent of a parent/guardian and yourself. Privacy will be maintained by having participants take the questionnaire home to fill out.

New Findings

During the course of this study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participation in the research, or new alternatives to participation which might cause you to change your mind about continuing in the study. If new information is provided to you, your consent to continue participating in this study will be re-obtained.

Risks

No foreseeable risks are associated with this study.

Unforeseeable Risks

Due to the nature of this research study, no unforeseeable risks are associated with this study.
Informed Consent
Female Adolescent Body Image

March 20, 2000

Benefits
There may or may not be any direct benefit to you from these procedures. The investigator, however, may learn more about adolescent body image and eating disorders among adolescents. The research investigators don’t expect participants to experience any benefits from participating in this research study. The information gained from this study may benefit those who study, work with, and assist adolescents through the knowledge gained.

Explanation and Offer to Answer Questions
Tracy Funk, a graduate research assistant and / or your Health or Science teacher has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Professor Randall Jones at 797-1553.

Extra Cost(s)
There is no cost for participation in this research study.

Voluntary Nature of Participation and Right to Withdraw Without Consequence
Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without consequence or loss of benefits. You may be withdrawn from this study without your consent by the investigator if you do not fill out the questionnaire provided.

Anonymous Nature of This Research Study
Participants in this research study will not identify themselves on the questionnaires provided. Research records will be kept confidential consistent with federal and state regulations. Only the investigator and the student researcher will have access to the data, and it will be kept in a locked file cabinet in a locked room.

IRB Approval Statement
The Institutional Review Board (IRB) for the protection of human subjects at Utah State University has reviewed and approved this research project.
Informed Consent
Female Adolescent Body Image

Copy of Consent
You have been given two copies of this Informed Consent. Please sign both copies and retain one copy for your files.

Investigator Statement
"I certify that the research study has been explained to the above individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised, have been answered."

Signature of PI and Research Student

[Signature]
Dr. Randall M. Jones
Principal Investigator
797-1553

[Signature]
Tracy Funk
Student Researcher
797-1525

Signature of Parent(s) / Guardian

I have read and understand this Informed Consent Form and I am willing to have my adolescent participate in this research study.

Name of Parent / Guardian

Signature of Parent / Guardian

Date
March 20, 2000

Informed Consent
Female Adolescent Body Image

Adolescent Assent

I understand that my mother/father/parent(s) is/are aware of this research study and that permission has been given for me to participate. I understand that it is up to me to participate even if my parents say yes. If I do not want to be in this study, I do not have to and no one will be upset if I don’t want to participate or if I change my mind later and want to stop. I can ask any questions that I have about this study now or later. By signing below, I agree to participate.

Name of Adolescent ___________________________ Date __________

Signature of Adolescent ___________________________
Adolescent Girls: A Personal Opinion Survey

We, from the department of Family and Human Development at Utah State University are interested in your attitudes, feelings, and beliefs toward yourself, your physical body, and food and eating. We want to better understand the part that these attitudes, experiences and beliefs play in the lives of adolescent girls.
Dear Student:

This questionnaire asks about your attitudes concerning your own physical body, your beliefs about yourself in general, as well as your attitudes and experiences in regard to food and eating. We are interested in what girls your age think about their bodies and how their beliefs are related to other areas of their lives.

We believe that the best way to learn about these attitudes and beliefs is to ask girls themselves. Because this questionnaire asks about personal feelings, attitudes, and behaviors there are no right and wrong answers. The BEST response to each of the statements is your PERSONAL BELIEF or ACTUAL EXPERIENCE.

Your answers to the items in the questionnaire are anonymous, so please do not write your name on any of the materials.

If you are confused by a question or do not know how to respond to a particular question, please write next to the question “Don’t Know” or ask the person passing out the questionnaires.

Please DO NOT ask another student what they think a question means.

If you have any further questions about this survey, feel free to call us at the number listed below.

THANK YOU for taking the time to fill this out, and for your honesty and thoughtfulness.

Sincerely,

Randall M. Jones
Project Director
Utah State University
(435) 797-1553

Tracy Funk
Graduate Student
Utah State University
(435) 797-1525
PERSONAL INFORMATION

1. I am now _____ years old.

2. I was born in the year _____.

3. My grade in school is  
   a. 8th  
   b. 9th

PLEASE READ THE INSTRUCTIONS CAREFULLY

1. Choose your *ideal* figure by marking where you think you fall on the 0 to 10 line.

2. Choose the figure that reflects how you *think* you look by placing a mark on the 0 to 10 line.

3. Choose the figure that reflects how you *feel* most of the time by placing a mark on the 0 to 10 line.
INSTRUCTIONS - PLEASE READ CAREFULLY

The following pages contain a series of statements about how people might think, feel, or behave. You are asked to indicate the extent to which each statement describes YOU personally.

In order to complete the questionnaire, read each statement carefully and decide how much it describes you personally. Using a scale like the one below, indicate your answer by entering a number in the space provided.

Some statements will sound similar. This is deliberate; we want to know if different wordings lead to different responses. Please answer each question according to your own beliefs.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely</td>
<td>Mostly</td>
<td>Neither</td>
<td>Mostly</td>
<td>Definitely</td>
</tr>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Agree Nor</td>
<td>Agree</td>
<td>Agree</td>
</tr>
</tbody>
</table>

EXAMPLE:

4 I am usually in a good mood.

In the blank space, enter a 1 if you definitely disagree with the statement; a 2 if you mostly disagree; a 3 if you neither agree nor disagree; a 4 if you mostly agree; or enter a 5 if you definitely agree with the statement.

PLEASE TURN THE PAGE
<table>
<thead>
<tr>
<th></th>
<th>Definitely Agree</th>
<th>Mostly Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Mostly Disagree</th>
<th>Definitely Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Before going out in public, I always notice how I look.</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>I am careful to buy clothes that will make me look my best.</td>
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<tr>
<td>3</td>
<td>I constantly worry about being or becoming fat.</td>
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<tr>
<td>4</td>
<td>I like my looks just the way they are.</td>
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<tr>
<td>5</td>
<td>I check my appearance in a mirror whenever I can.</td>
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<tr>
<td>6</td>
<td>Before going out, I usually spend a lot of time getting ready.</td>
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<tr>
<td>7</td>
<td>I am very conscious of even small changes in my weight.</td>
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<tr>
<td>8</td>
<td>Most people would consider me good-looking.</td>
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<tr>
<td>9</td>
<td>It is important that I always look good.</td>
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<tr>
<td>10</td>
<td>I use very few grooming products.</td>
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<tr>
<td>11</td>
<td>I am self-conscious if my grooming isn’t right.</td>
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<tr>
<td>12</td>
<td>I usually wear whatever is handy without caring how it looks.</td>
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<tr>
<td>13</td>
<td>I like the way my clothes fit me.</td>
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<td></td>
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<tr>
<td>14</td>
<td>I don’t care what people think about my appearance.</td>
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<tr>
<td>15</td>
<td>I take special care with my hair grooming.</td>
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<tr>
<td>16</td>
<td>I dislike my physique.</td>
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<tr>
<td>17</td>
<td>I am physically unattractive.</td>
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<tr>
<td>18</td>
<td>I never think about my appearance.</td>
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<tr>
<td>19</td>
<td>I am always trying to improve my physical appearance.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>I am on a weight-loss diet.</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For the remainder of the items use the response scale below each item and enter the number beside your answer in the space provided.

21. I have tried to lose weight by fasting or going on crash diets.
   1. Never
   2. Rarely
   3. Sometimes
   4. Often
   5. Very Often

22. I think I am:
   1. Very Underweight
   2. Somewhat Underweight
   3. Normal Weight
   4. Somewhat Overweight
   5. Very Overweight

23. From looking at me, most other people would think I am:
   1. Very Underweight
   2. Somewhat Underweight
   3. Normal Weight
   4. Somewhat Overweight
   5. Very Overweight

(continued on the next page)
24-32. Use this 1 to 5 scale to indicate how satisfied you are with each of the following areas or aspects of your body:

<p>| | | | | |</p>
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<td>1</td>
<td>2</td>
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<tr>
<td>Very Dissatisfied</td>
<td>Mostly Dissatisfied</td>
<td>Neither Satisfied</td>
<td>Mostly Satisfied</td>
<td>Very Satisfied</td>
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<tr>
<td>Nor Dissatisfied</td>
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24. Face (facial features, complexion)

25. Hair (color, thickness, texture)

26. Lower torso (buttocks, hips, thighs, legs)

27. Mid torso (waist, stomach)

28. Upper torso (chest or breasts, shoulders, arms)

29. Muscle tone

30. Weight

31. Height

32. Overall appearance

Please Turn To The Next Page
You are half way done - won’t take long to finish!

This part is similar to the section that you just completed. Read the statement and think about which word describes YOUR beliefs (always, usually, often, sometimes, rarely or never) and insert that number in the space provided.

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<tr>
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<th>1</th>
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<tr>
<td><strong>Always</strong></td>
<td><strong>Usually</strong></td>
<td><strong>Often</strong></td>
<td><strong>Sometimes</strong></td>
<td><strong>Rarely</strong></td>
<td><strong>Never</strong></td>
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<td>1.</td>
<td>I am terrified about being overweight.</td>
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<td>2.</td>
<td>I avoid eating when I am hungry.</td>
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<td>3.</td>
<td>I find myself preoccupied with food.</td>
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<td>4.</td>
<td>I have gone on eating binges where I feel that I may not be able to stop.</td>
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<td>5.</td>
<td>I cut my food into small pieces.</td>
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<td>6.</td>
<td>I am aware of the calorie content of foods that I eat.</td>
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<td>7.</td>
<td>I particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc)</td>
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<td>8.</td>
<td>I feel that others would prefer if I ate more.</td>
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<td>9.</td>
<td>I vomit after I have eaten.</td>
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<td>10.</td>
<td>I feel extremely guilty after eating.</td>
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<td>11.</td>
<td>I am preoccupied with a desire to be thinner.</td>
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<td>12.</td>
<td>I think about burning up calories when I exercise.</td>
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<td>13.</td>
<td>Other people think that I am too thin.</td>
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<td>14.</td>
<td>I am preoccupied with the thought of having fat on my body.</td>
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<td>15.</td>
<td>I take longer than others to eat my meals.</td>
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<td>16.</td>
<td>I avoid foods with sugar in them.</td>
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<td>17.</td>
<td>I eat diet foods.</td>
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<tr>
<td></td>
<td>Always</td>
<td>Usually</td>
<td>Often</td>
<td>Sometimes</td>
<td>Rarely</td>
<td>Never</td>
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<tr>
<td>18.</td>
<td>1 feel that food controls my life.</td>
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<td>19.</td>
<td>I display self-control around food.</td>
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<td>20.</td>
<td>I feel that others pressure me to eat.</td>
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<tr>
<td>21.</td>
<td>I give too much time and thought to food.</td>
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<td>22.</td>
<td>I feel uncomfortable after eating sweets.</td>
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<td>23.</td>
<td>I engage in dieting behavior.</td>
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<td>24.</td>
<td>I like my stomach to be empty.</td>
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<td>25.</td>
<td>I have the impulse to vomit after meals.</td>
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<td>26.</td>
<td>I enjoy trying new rich foods.</td>
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</table>
For this section please indicate the item that YOU believe to be most true of yourself by placing an “X” in the space provided.

1. I feel that I’m a person of worth, at least on an equal plane with others.
   1. ______ Strongly agree
   2. ______ Agree
   3. ______ Disagree
   4. ______ Strongly Disagree

2. I feel that I have a number of good qualities.
   1. ______ Strongly agree
   2. ______ Agree
   3. ______ Disagree
   4. ______ Strongly Disagree

3. All in all, I am inclined to feel that I am a failure.
   1. ______ Strongly agree
   2. ______ Agree
   3. ______ Disagree
   4. ______ Strongly Disagree

4. I am able to do things as well as most other people.
   1. ______ Strongly agree
   2. ______ Agree
   3. ______ Disagree
   4. ______ Strongly Disagree

5. I feel I do not have much to be proud of.
   1. ______ Strongly agree
   2. ______ Agree
   3. ______ Disagree
   4. ______ Strongly Disagree

6. I take a positive attitude toward myself.
   1. ______ Strongly agree
   2. ______ Agree
   3. ______ Disagree
   4. ______ Strongly Disagree
7. On the whole, I am satisfied with myself.
   1. Strongly agree
   2. Agree
   3. Disagree
   4. Strongly Disagree

8. I wish I could have more respect for myself.
   1. Strongly agree
   2. Agree
   3. Disagree
   4. Strongly Disagree

9. I certainly feel useless at times.
   1. Strongly agree
   2. Agree
   3. Disagree
   4. Strongly Disagree

10. At times I think I am no good at all.
    1. Strongly agree
    2. Agree
    3. Disagree
    4. Strongly Disagree

Please Turn To The Next Page
This is the Last Section!

PLEASE READ THIS FIRST

FINALLY, we are interested in finding out what types of female role models girls your age look up to, and want to be like. In this section please indicate one female that YOU want to be like or that you look up to in each section. This part of the survey is very important to our research so your participation in this section is greatly appreciated.

Indicate the name of the female role model, what she does, for example her profession, occupation, title or a brief description of who she is. Finally, list one important reason that you look up to or want to be like this person.

1. Name of one female role model within your family, including relatives.

________________________________________________________________________

2. What does this person do (occupation, profession, title) or briefly describe who she is.

________________________________________________________________________

3. List one reason for identifying this person as someone that you look up to or would like to be like. In other words, what is it about this person that you are most attracted to, that draws you to pick out this one person out of all other people.

________________________________________________________________________

Please Turn To The Next Page
4. Name of one female role model outside of your family.


5. What does this person do (occupation, profession, title) or briefly describe who she is.


6. List one reason for identifying this person as someone that you look up to or would like to be like. In other words, what is it about this person that you are most attracted to, that draws you to pick out this one person out of all other people.

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY!

PLEASE TAKE A MOMENT TO LOOK BACK THROUGH THE QUESTIONNAIRE TO MAKE SURE THAT YOU ANSWERED ALL OF THE QUESTIONS. GIVE YOUR COMPLETED QUESTIONNAIRE TO THE INSTRUCTOR WHO GAVE IT TO YOU.
Appendix D

Questionnaire Changes Made for University Participants

(Only pages that differ from the freshman center questionnaire are included)
Instructions

1. Two consent forms are included in this packet. One must be signed and returned with the completed questionnaire for your questionnaire to be included in the study. The other is for your records.

2. Do not put your name on the questionnaire.

3. The questionnaire must be completed to be included in the study.

4. A drop off box for your completed questionnaire will be available on Thursday in your class. There will be two boxes - one for the consent form and one for your completed questionnaire.

5. If you would like a copy of the results sent to you please include your name and address on the consent form.

Thank you for your participation in this research study.
Introduction/Purpose

Dr. Randall M. Jones, in the Department of Family and Human Development at Utah State University, is conducting a research study to find out more about female body image. You have been asked to take part because you are enrolled in a Family and Human Development course at USU. There will be approximately 100 participants at this site. The purpose of this study is to conduct research on the subject of body image among females as well as their attitudes and experiences in regard to food and eating. We are interested in how females think about their bodies and how their beliefs are related to other areas of their lives.

Procedures

If you agree to be in this study you will be expected to fill out a questionnaire during one class period. Privacy will be maintained by having participants spread out within the classroom provided.

New Findings

During the course of this study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participation in the research, or new alternatives to participation which might cause you to change your mind about continuing in the study. If new information is provided to you, your consent to continue participating in this study will be re-obtained.

Risks

No foreseeable risks are associated with this study.

Unforeseeable Risks

Due to the nature of this research study, no unforeseeable risks are associated with this study.
Benefits

There may or may not be any direct benefit to you from these procedures. The investigator, however, may learn more about body image and eating disorders among females. The research investigators don't expect participants to experience any benefits from participating in this research study. The information gained from this study may benefit those who study, work with, and assist females through the knowledge gained.

Explanation and Offer to Answer Questions

Tracy Funk, a graduate research assistant and / or your FHD instructor / professor has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Professor Randall Jones at 797-1553.

Extra Cost(s)

There is no cost for participation in this research study.

Voluntary Nature of Participation and Right to Withdraw Without Consequence

Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without consequence or loss of benefits. You may be withdrawn from this study without your consent by the investigator if you do not fill out the questionnaire provided.

Anonymous Nature of This Research Study

Participants in this research study will not identify themselves on the questionnaires provided. Research records will be kept confidential consistent with federal and state regulations. Only the investigator and the student researcher will have access to the data, and it will be kept in a locked file cabinet in a locked room.

IRB Approval Statement

The Institutional Review Board (IRB) for the protection of human subjects at Utah State University has reviewed and approved this research project.
Copy of Consent

You have been given two copies of this Informed Consent. Please sign both copies and retain one copy for your files.

Investigator Statement

"I certify that the research study has been explained to the above individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised, have been answered."

Signature of PI and Research Student

Dr. Randall M. Jones
Principal Investigator
797-1553

Tracy Funk
Student Researcher
797-1525

You agree to participate.

Signature of Research Participants

Participant’s name

Participant’s signature Date
Female Body Image: A Personal Opinion Survey

We, from the department of Family and Human Development at Utah State University are interested in your attitudes, feelings, and beliefs toward yourself, your physical body, and food and eating. We want to better understand the part that these attitudes, experiences and beliefs play in the lives of females.
Dear Student:

This questionnaire asks about your attitudes concerning your own physical body, your beliefs about yourself in general, as well as your attitudes and experiences in regard to food and eating. We are interested in what females your age think about their bodies and how their beliefs are related to other areas of their lives.

We believe that the best way to learn about these attitudes and beliefs is to ask females themselves. Because this questionnaire asks about personal feelings, attitudes, and behaviors there are no right and wrong answers. The BEST response to each of the statements is your PERSONAL BELIEF or ACTUAL EXPERIENCE.

Your answers to the items in the questionnaire are anonymous, so please do not write your name on any of the materials.

If you are confused by a question or do not know how to respond to a particular question, please write next to the question “Don’t Know” or ask the person passing out the questionnaires.

Please DO NOT ask another student what they think a question means.

If you have any further questions about this survey, feel free to call us at the number listed below.

THANK YOU for taking the time to fill this out, and for your honesty and thoughtfulness.

Sincerely,

Randall M. Jones
Project Director
Utah State University
(435) 797-1553

Tracy Funk
Graduate Student
Utah State University
(435) 797-1525
PERSONAL INFORMATION

1. I am now _______ years old.

2. I was born in the year _______.

PLEASE READ THE INSTRUCTIONS CAREFULLY

1. Choose your ideal figure by marking where you think you fall on the 0 to 10 line.

2. Choose the figure that reflects how you think you look by placing a mark on the 0 to 10 line.

3. Choose the figure that reflects how you feel most of the time by placing a mark on the 0 to 10 line.
Appendix E

Permission-To-Use Letter:

The Figure Rating Scale
Tracy Funk  
90 W. 400 N.  
Wellsville, Utah  84339  
Home Phone 435-245-5205  
Email TLMF@Netscape.Net  

May 10, 1999  

Dr. Albert Stunkard  
University of Pennsylvania Medical Center  
3600 Market Street, Suite 734  
Philadelphia, PA 19104-2648  

RE: THE FIGURE RATING SCALE  

Dear Dr. Stunkard:  

I am in the process of preparing my Thesis in the Department of Family and Human Development at Utah State University. I hope to complete in the Fall of 1999.  

I am writing to request your permission to use the Figure Rating Scale (FRS) in my Thesis entitled, "Adolescent Role Models and Body Image". This test has been mentioned quite frequently in the literature. Although I have seen many examples of a variety of rating scales using human figures, I have not been able to locate an acceptable copy of the (FRS). If you provide permission for use of this scale, could one be sent to me that would be appropriate for use along with any other relevant and/or important information? I will include acknowledgments and/or appropriate citations to your work and copyright and reprint rights information in a special appendix. The bibliographical citation will appear at the end of the manuscript. Please advise me of any special instructions that you require.  

Please indicate your approval of this request by signing in the space provided, attaching any other form or instruction necessary to confirm permission. If you charge a reprint fee for use of your material, please indicate that as well. If you have any questions, please call me at the above number or e-mail me.  

Thank you for your time and help.  

Tracy McBride Funk  

Enc:  1 - self-addressed, stamped envelope  

I hereby give permission to Tracy Funk to use the Figure Rating Scale (FRS) in her Thesis, with the following acknowledgment:  

(Acknowledgment, including full bibliographical information)  

Fee__________________________  

Signed_________________________
Appendix F

Permission-To-Use Letter:

The Multidimensional Body-Self Relations Questionnaire
May 10, 1999

Dr. Thomas F. Cash
Department of Psychology
Old Dominion University
Norfolk, VA. 23529-0267

RE: THE MULTI-DIMENSIONAL BODY-SELF RELATIONS QUESTIONNAIRE

Dr. Cash

I am interested in reviewing the Multi-Dimensional Body-Self Relations Questionnaire for use in my thesis. I am a graduate student at Utah State University. This questionnaire has been mentioned quite frequently in the literature but I have been unable to find a copy of it. If possible could a copy be sent to me to review or could I get further information on how to obtain it and find out more about it? My thesis is entitled “Adolescent Role Models and Body Image”. I would be most appreciative of any help that you could give.

Also, I am quite concerned about measuring body image as accurately as possible and was glad when I came upon the journal article in the 1997 International Journal of Eating Disorders titled “The Nature and Extent of Body-Image Disturbances in Anorexia Nervosa: A Meta-Analysis”. Suggestions on any other appropriate measures would also be appreciated.

Thank you for your time.

Tracy McBride Funk
THE MULTIDIMENSIONAL BODY-SELF RELATIONS QUESTIONNAIRE

THOMAS F. CASH, PH.D.
Professor of Psychology
Old Dominion University
Norfolk, Virginia 23529-0267
(Office Phone: 804-683-4439)

The Multidimensional Body-Self Relations Questionnaire (MBSRQ) is a 69-item self-report inventory for the assessment of self-attitudinal aspects of the body-image construct. Here, body image is conceived as one's attitudinal dispositions toward the physical self (Cash & Pruzinsky, 1990). As attitudes, these dispositions include affective/evaluative, cognitive/attentional, and behavioral components. Moreover, the physical self encompasses not only the aesthetic of one's physical size/appearance but also its competence or "fitness" and its biological integrity or "health/illness."

An initial version in 1983 (by T.F. Cash and Barbara Winstead) contained about 300 items and was termed the BSRQ. Subsequent versions iteratively eliminated or replaced items on the basis of rational/conceptual and psychometric criteria. In 1985, Cash, Winstead, and Janda used the instrument in a national body-image survey. From over 30,000 respondents, approximately 2,000 were randomly sampled, stratified on the basis of the sex X age distribution in the U.S. population. In addition to the original publication of survey results (see Cash et al., 1986), numerous publications have resulted from analyses of this database and from research with other diverse samples (see appended References).

A cross-validated factor-analytic study of the original database (Brown, Cash, & Mikulka, 1990) supports the conceptual components of the instrument. The MBSRQ's Factor Subscales reflect two dispositional dimensions—"Evaluation" and cognitive-behavioral "Orientation"—vis-a-vis each of the three somatic domains of "Appearance," "Fitness," and "Health/Illness." An minor exception was an emergence of separate Health and Illness Orientation factors.

In addition to its seven Factor Subscales, the MBSRQ includes three special multi-item subscales: (1) The Body-Areas Satisfaction Scale (BASS) approaches body-image evaluation as satisfaction-dissatisfaction with discrete body features (similar to earlier extant inventories, such as Smedley and Jourard's Body Cathexis Scale, Bohnstedt's Body Parts Satisfaction Scale, and Franzoi's Body Esteem Scale). The remaining two subscales tap weight-related body-image dispositions: (2) The Overweight Preoccupation Scale assesses fat anxiety, weight vigilance, dieting, and eating restraint. (3) The Self-Classified Weight Scale assesses self-appraisals of weight from underweight to overweight.

This manual provides norms, reliability, scoring formulas, interpretative information, and references pertinent to the validity and clinical utility of the MBSRQ. All subscales possess acceptable internal consistency and stability. Cited sources confirm the MBSRQ's convergent, discriminant, and construct validities.
Appendix G

Permission-To-Use Letter:

The Eating Attitudes Test
Dear Colleague,

Thank you for your request for information on the Eating Attitudes Test (EAT). You have permission to use the EAT in your research and clinical work and there is no charge for this permission. I would appreciate you providing me with a copy of any reports or publications in which this instrument is used since it may serve as a useful resource for other researchers and clinicians.

I have also enclosed information about the Eating Disorder Inventory (EDI-2) which is a standardized, multi-scale instrument with a much broader focus than the EAT. It is comprised of 3 subscales tapping attitudes and behaviors concerning eating, weight, and shape (Drive for Thinness, Bulimia, Body Dissatisfaction) plus subscales assessing more general psychological traits or organizing constructs clinically relevant to eating disorders (Ineffectiveness, Perfection, Interpersonal Distrust, Interceptive Awareness, Maturity Fears, Asceticism, Impulse Regulation, and Social Insecurity).

The EDI-2 manual, test booklets, the EDI-2 symptom checklist and profile forms are available from the publisher, Psychological Assessment Resources, P.O. Box 998, Odessa FL 33556. You can call PAR at 1-800-331-8378.

If you have further questions, please do not hesitate to contact me.

Sincerely,

[Signature]

David M. Garner, Ph.D.
Director,
Adjunct Professor,
Department of Psychology
Bowling Green University;
Women’s Studies Program,
University of Toledo

Enclosure
Appendix H

Permission-To-Use Letter:

The Rosenberg Self-Esteem Scale
Thank you for your request to reproduce copyrighted material from a Princeton University Press publication. In order to facilitate your request, this form must be completed in its entirety. Incomplete forms cannot be processed. If a fax number is not available, please include a stamped, self-addressed envelope. This agreement will grant the Requester permission to reproduce the material only according to the use stated below. Please note that our grant of permission does not apply to any part of the material that is separately copyrighted. It is the responsibility of the Requester to determine the correct copyright source for the material based on the credit lines or source notations listed in the book. This permission is void if the non-refundable payment is not received within 3 months from the date on the contract/invoice. A copy of this contract/invoice must accompany your payment check to the above address.

1. Requester's Name: Tracy Funk  
   Address: 90 W. 400 N. Wellsville, UT 84675  
   Phone: 435-245-5205

2. Author: Morris Rosenberg  
   Title: Society and the Adolescent Self Image  
   Copyright line from front of book:  
   Published by Princeton University Press 1965  
   Pages on which material is found (X-X): 305-307  
   FOR TEXT: Total page count: 3  
   Total word count: 700  
   FOR ILLUSTRATIONS: Total illustration/plane count: CAPTION/CREDIT LINE

3. The material will be used in the following Publication:  
   Author: Tracy Funk  
   Title: Female Adolescent Role Models and Body Image  
   To be published by:  
   Publication date:  
   Hardcover:  
   Paperback:  
   Length:  
   Price:  
   Print-run:  
   If none of the above, state purpose:  
   Thesis - Utah State University - Dept. of Family and Human Dev

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Date ______________________

Permission granted □  
Permission denied □  
Fee $ ______________________  
Contract / invoice # ____________

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Estate of Dr. Rosenberg at Dept. of Sociology,  
University of Maryland, College Park, MD 20742

Permissions Coordinator
Appendix I

Reason Given for Choice of Role Model
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<thead>
<tr>
<th>Reason</th>
<th>Count</th>
<th>% of responses</th>
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<tbody>
<tr>
<td>1. good work ethic, hard worker</td>
<td>9</td>
<td>2.6</td>
</tr>
<tr>
<td>2. caring, kind, understanding, nice, loving...</td>
<td>56</td>
<td>16.3</td>
</tr>
<tr>
<td>3. dedicated to family, good mother, supportive of family</td>
<td>7</td>
<td>2.0</td>
</tr>
<tr>
<td>4. talented, has many strengths</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>5. giving, helps others, charitable, service volunteer</td>
<td>16</td>
<td>4.7</td>
</tr>
<tr>
<td>6. physical attractiveness, beautiful, cute, pretty</td>
<td>34</td>
<td>9.9</td>
</tr>
<tr>
<td>7. successful, good at what she does, accomplished</td>
<td>22</td>
<td>6.4</td>
</tr>
<tr>
<td>8. skinny, thin, good body, fit, in shape</td>
<td>20</td>
<td>5.8</td>
</tr>
<tr>
<td>9. driven, motivated, unafraid, bold, assertive, a leader</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>10. confident</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>11. intelligent, wise</td>
<td>9</td>
<td>2.6</td>
</tr>
<tr>
<td>12. personality</td>
<td>21</td>
<td>6.1</td>
</tr>
<tr>
<td>13. positive attitude</td>
<td>12</td>
<td>3.5</td>
</tr>
<tr>
<td>14. motivating, uplifting, influential, good example, teaches</td>
<td>14</td>
<td>4.1</td>
</tr>
<tr>
<td>15. self-directed, focused, knows where she is going in life, own self, stands up for beliefs/opinions</td>
<td>13</td>
<td>3.8</td>
</tr>
<tr>
<td>16. responsible</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>17. rich, makes good money</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>18. honest</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>19. religious, spiritual</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>20. active, busy, well rounded, energetic</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>21. well liked or loved by others</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>22. works out</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>23. strong, has inner strength, resilient</td>
<td>13</td>
<td>3.8</td>
</tr>
<tr>
<td>24. good person, high standards, amazing, awesome</td>
<td>9</td>
<td>2.6</td>
</tr>
<tr>
<td>25. happy, enjoys life</td>
<td>19</td>
<td>5.5</td>
</tr>
<tr>
<td>26. takes time for or knows what is important</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>27. creative</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>29. best friends, enjoy one another, like or love her</td>
<td>12</td>
<td>3.5</td>
</tr>
<tr>
<td>31. happy with self, has high self-esteem</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>32. famous</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>33. doesn’t care about weight, doesn’t have to be skinny, not a model</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>34. easy to talk to / feel comfortable around / can be myself / she really listens</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>35. has a great job</td>
<td>4</td>
<td>1.2</td>
</tr>
</tbody>
</table>