GENDER DIFFERENCES IN BODY IMAGE PERCEPTION AMONG COLLEGE STUDENTS

STACEY COULTER

To the Graduate Council:

I am submitting herewith a thesis written by Stacey Coulter entitled "Gender Differences in Body Image Perception Among College Students". I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

Dr. Stuart Bonnington, Major Professor

We have read this thesis and recommend its acceptance:

Potti Wilson

Accepted for the Council:

Dr. Lou M. Beasley, Dear of Graduate School

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were those times I thought of giving up. He had faith in me and

at Garry Wallace. Without their support, I would have never had the

I Finally, I would like to express my gratitude to my family: Lurry,

A Thesis

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ABSTRACT

This study attempted to examine gender differences in body image perception. Body image perception was measured using male and female figure drawings that ranged on a continuum from obese to thin to muscular. Participants were presented with same sex figure drawings and were instructed to respond to three questions: a) Which figure most closely resembles your current body shape?; b) Which figure best represents your ideal body shape?; and c) Which figure do you think the opposite sex will find most attractive? Finally, participants were presented with figure drawings of the opposite sex and instructed to indicate which figure they found most attractive. An analysis of the results indicated that women desired to be thinner than they currently are and that women were quite accurate at judging the female figure that men would find most attractive. Results also suggested that men desire to be more muscular than they currently are and that men misperceive the male figure that women find most attractive. Results suggest that both men and women are dissatisfied with their body shape; however, women desire to be thinner while men desire to be more muscular. Additionally, these findings suggest that men may be dissatisfied with their body shape and desire to be more muscular because they believe that women find a more muscular figure to be attractive.

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CHAPTER 1

Historically, body image concerns have been considered a female phenomenon (Parks & Read, 1997). Research has shown that women are generally dissatisfied with their bodies and desire to be thinner (Fallon & Rozin, 1985; Spitzer, Henderson, & Zivian, 1999). This is not surprising given that the media bombards women with images of ultraslim women. In fact, the ideal image of women portrayed in the media has gradually become thinner within the last three decades (Stevens & Tiggemann, 1998). Evidence suggests that the thin-ideal portrayed by the media is internalized by women, resulting in a distorted body image (Brewis, 1999). Worse yet, this thin-ideal has been associated with negative consequences, such as the development of eating disorders (i.e., anorexia nervosa and bulimia nervosa; Demarest & Allen, 2000).

Research in the area of body image has focused exclusively on women since the phenomenon was believed to be unique to females. However, recent evidence suggests that body image concerns are also relevant to males. That is, men perceive themselves as under pressure to obtain the ideal male body, which is muscular and mesomorphic (Spitzer et al., 1999). In fact, muscularity has taken the spotlight in the media in recent years (Pope, Gruber, Choi, Olivardia, & Phillips, 1997). Some individuals become consumed by these cultural messages and become vulnerable to developing muscle dysmorphia, which is a pathological preoccupation with becoming muscular to the point individuals become obsessed with weightlifting and dieting (Pope et al., 1997). In addition, cultural ideals of muscularity may contribute to lower self-esteem about the body, and possibly lead men to abuse anabolic-androgenic steroids (Spitzer et al., 1999). With an increased awareness of the negative consequences of body dissatisfaction in men and women, researchers have begun investigating gender differences in body image. The most popular way to investigate body image distortion is the use of figure drawings of varying sizes and shapes. Participants are instructed to select their current and ideal body size; therefore, the difference between the current and ideal figure

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is a measure of body dissatisfaction (Stevens & Tiggemann, 1998). The current study is designed to investigate gender differences in body image perception of men and women using figure drawings that range on a continuum from obese to thin to muscular.

Body Dissatisfaction in Women

Research has shown that the ideal female body shape varies across cultures (Barber, 1998). Several studies have shown that African American women are less dissatisfied with their bodies than Caucasian women (Patel & Gray, 2001) or Hispanic women (Demarest & Allen, 2000). One indicator of increased body satisfaction is that African American women typically exhibit less concern about dieting, obesity, and weight fluctuations (Patel & Gray, 2001). Similar to Caucasian women, African American women experience a discrepancy between their current and ideal figure perception; however, the discrepancy is smaller for African American women (Patel & Gray, 2001). One possible explanation for the difference in body satisfaction among African American women and Caucasian women is a greater acceptance of larger body sizes among African American men and women (Demarest & Allen, 2000). Research also suggests that African American women are more accurate at estimating the body shape African American men prefer. This may serve to protect African American women from body dissatisfaction because African American men typically prefer larger women than do Caucasian men (Patel & Gray, 2001).

Despite the apparent discrepancy in body satisfaction among cultures, recent research has indicated that approximately 75% of American women are dissatisfied with their bodies (Williams & Depcik, 2001). This is not surprising considering that in Western societies the ideal woman is portrayed as thin (Demarest & Allen, 2000). The media has been primarily responsible for promoting this thin-ideal. Evidence suggests that women idealize and become consumed with attaining an ultraslender body, which is the symbol of female attractiveness portrayed in the media (Davis & Cowles, 1991). However, in Western societies the pursuit of beauty has been viewed as a feminine quality. Therefore, women's preoccupation with physical appearance is considered normal according

to societal standards (Davis & Cowles, 1991). Women internalize images of ultraslim women portrayed in the media, which results in a distorted body image (Brewis, 1999; Thornton & Maurice, 1997). Research has shown that women are generally inaccurate at estimating their current body size. In fact, women often perceive themselves to be larger than they actually are (Brewis, 1999). Touyz, Beaumont, Collins and Cowie (1985) investigated body shape perception in 19 patients with bulimia nervosa and 31 patients with anorexia nervosa using a distorting lens technique. Participants wore black leotards and were photographed against a light background. The Polaroid pictures were then scanned by a video camera and the images were presented on a television screen. The participants were instructed to estimate their own physique and then to set the image to their ideal physique. Results suggest that both groups overestimated their body shapes. However, the ideal body shape of patients with bulimia was much thinner than their current shape.

Not only are women exposed daily to images of the thin-ideal through the media, but women are also exposed to the thin-ideal from an early age. Research has shown that exposure to fashion dolls, such as Mattel Co.'s Barbie, at an early age can influence body image (Wilkinson, 1987).

Norton, Olds, Olive, and Dank (1996) found that Barbie would have a waist circumference of 16 inches, if extrapolated to a height of 67 inches. In essence, young girls are exposed to dolls with a figure "approaching the impossibility of male superhero's biceps" (Pope et al., 1999; p.71). Children who play with unrealistically thin dolls, such as Barbie, may compare their own bodies to that of the doll, resulting in body dissatisfaction (Pederson & Markee, 1991).

Considering that women are exposed to ultraslender images from an early age through fashion dolls and the media, it is not surprising that women become dissatisfied with their own bodies. Stice and Shaw (1994) randomly exposed 157 female undergraduates, ranging in age from 17 to 52, to pictures from magazines containing ultra-thin models, average-size models, or no models. Results indicated that exposure to the thin-ideal produced depression, stress, guilt, shame, insecurity, and body dissatisfaction.

Stevens and Tiggemann (1998) examined women's body figure preference in 180 women ages 18 to 59 years from South Australia. Participants were presented with nine figure drawings of female figures that ranged on a continuum from thin to obese. Participants were instructed to indicate the figure that most closely resembled their current body shape, their ideal body shape, and the figure they believed the opposite sex would find most attractive. Stevens and Tiggemann found that women perceived themselves as larger than they actually were, t(1, 178) = 12.9. Results suggest that women in the general population display significant body dissatisfaction and desire to be considerably thinner than they perceive themselves to be.

Similar results were obtained when Cash and Henry (1995) conducted a door-to-door survey of 803 women, 18 to 70 years old, from 19 cities in the Northeast, Southeast, Southwest, West Coast, and Midwest. Interviewers selected participants based on demographic quotas obtained from 1990 census data. Participants were given three subscales of the Multidimensional Body-Self Relations Questionnaire (MBSRQ; Cash, 1994). The Appearance Evaluation measures the "global evaluation of one's appearance" (Cash & Henry, p. 20), the Body Area Satisfaction Scale consists of "5-point dissatisfaction-satisfaction ratings of eight physical areas/attributes (i.e., height, weight, hair, face, upper torso, mid-torso, lower torso, and muscle tone"; Cash & Henry, p. 20), and Overweight Preoccupation measures dieting and eating behaviors. Results of the study indicate that almost half of the women were dissatisfied with their bodies, and were concerned about being or becoming overweight, which suggests that the prevalence of body dissatisfaction among women is widespread. In fact, results of these studies suggest that body dissatisfaction is not exclusive to college campuses, but is also found in the general population of women.

Eating Disorders

Consequences of subscribing to this thin-ideal are often negative. Numerous studies have shown that the thin-ideal promoted by the media is at least partially responsible for high rates of eating disorders among females (Demarest & Allen, 2000; Leit et al., 2000; Stice & Shaw, 1994). In

fact, the escalation of eating disorders within the past several years has paralleled a decrease in the weight of the ideal body for women promoted in the media. For instance, research suggests that Playboy centerfolds and Miss America contestants, two purported ideals for women, have become steadily more slender since the 1950's (Wiseman, Gray, Mosimann, & Ahrens, 1992). Additionally, research has found that the bust-to-waist ratios for actresses and models in women's magazines have gradually decreased during the last 30 years (Silverstein, Perdue, Peterson, & Kelly, 1986). Since the ideal female body size has been steadily decreasing in recent years, it should not be surprising that body dissatisfaction is growing more prevalent among women. A significant increase in the prevalence of eating disorders has occurred simultaneously with the increased prevalence of body dissatisfaction (Forbes, Adams-Curtis, Rade, & Jaber, 2001).

Although several explanations have been offered in response to this increase in body dissatisfaction and eating disorders, the most feasible explanation appears to be sociocultural pressures. The thin standard of attractiveness for women promoted by the media in recent years has been shown to lead women to rate their bodies more negatively, which ultimately results in dieting and an increased vulnerability to develop symptoms of eating disorders (Spitzer et al., 1999). In fact, societal pressures are believed to be a primary factor in both the promotion and maintenance of eating disorders among women. The media promotes the ultraslender body as the ideal female image (Stice & Shaw, 1994). Evidence suggests that women internalize and become consumed with attaining this ultraslender body (Davis & Cowles, 1991), thereby leading to the development and maintenance of eating disorders in vulnerable women.

Body Dissatisfaction in Men

Historically, body image concerns have been considered a female phenomenon. Recently, societal and cultural trends indicate that body image concerns are also relevant to males. That is, men perceive themselves under pressure to obtain the "ideal" male body, which includes a V-shaped masculine physique, tallness, and muscularity—mesomorphic body build (Forbes et al., 2000; Parks

& Read, 1997; Spitzer et al., 1999). Smith, Parr, Hornak, and Bells (2001) investigated body dissatisfaction in 38 male college students age 18 to 28 years. Participants were randomly assigned to an experimental or control group. The experimental group was presented with images from two men's fitness and fashion magazines. Both groups were then presented with the Branching Silhouette Protocol, which consists of nine silhouettes of male figures ranging on a continuum from thin to obese, and the Body Perfect Checklist, which instructs participants to choose body areas that they would like to change. Results indicate that participants in the experimental group were significantly more dissatisfied with their bodies, either desiring to lose or gain weight, as well as change specific body parts, such as the buttocks, abdominal area, chest, arms, and legs. Results suggest that exposure to the ideal male body contributes to body dissatisfaction among men.

The preponderance of evidence suggests a heightened emphasis on appearance among men. One additional sign of this emphasis is the notable increase in articles related to physical fitness and weight loss in men's magazines (Davis & Scott-Robertson, 2000). Individuals are exposed daily to unnaturally muscular images in magazines and motion pictures (Pope, Olivardia, Gruber, & Borowiecki, 1999). Leit et al. (2000) examined the cultural ideals of the male body by assessing the change in male centerfold models in all Playgirl magazines over the past 25 years. It appears that Playgirl centerfold models became increasingly "dense" and more muscular over time, indicating that societal norms of the ideal male body have gradually become more muscular since the 1990s. Pope, Olivardia, Borowiecki, and Cohane (2001) found similar results after examining the proportion of male and female bodies portrayed in advertisements in two women's magazines between 1958 and 1998. They found that the proportion of undressed male models increased sharply from single digit levels to approximately 30% starting in the 1980s, whereas the proportion of undressed female models remained relatively stable. This suggests that men are being exposed more to the muscular cultural ideal.

In fact, men are indirectly exposed to the cultural ideal of a muscular male body at an early age. Pope et al. (1999) examined the evolving ideals of masculinity by assessing the change in popular action toys manufactured over the last 30 years. The authors "measured the waist, chest, and bicep circumference of all the figures and scaled these measurements using classical allometry to a common height of 1.78 m" (Pope et al., 1999, p. 67). They found that modern action figures are significantly more muscular than their predecessors. This study suggests that young boys are exposed to modern action figures that "display the physiques of advanced bodybuilders and some display levels of muscularity far exceeding the outer limits of actual human attainment" (Pope et al., 1999, p. 70).

Muscle Dysmorphia

Within the last 20 years men have become more concerned with their physical appearance leading to possible negative implications (Pope et al., 2001). Cultural ideals of muscularity may contribute to lower self-esteem about the body resulting in body dissatisfaction (Leit et al., 2000). Societal pressures for men to conform to the cultural ideal of a masculine body may lead them to seek bodybuilding, male hormones (Blouin & Goldfield, 1995), dietary supplements (Pope et al., 2001), and anabolic steroids (Blouin & Goldfield, 1995; Forbes et al., 2001; Leit et al., 2000; McClelland, 1999; Pope et al., 2001; Spitzer et al., 1999) as a means to enhance muscularity (Pope et al., 2001) and achieve a "hypermesomorphic" look (Blouin & Goldfield, 1995).

Much the same as body dissatisfaction and acceptance of the thin-ideal in women can lead to eating disorders, body dissatisfaction and acceptance of the cultural ideal in men can lead to a relatively new type of phenomenon. Contemporary studies of athletes have reported a phenomenon similar in nature, but at the opposite extreme of the continuum from anorexia nervosa. Previously referred to as reverse anorexia nervosa, the syndrome has been renamed muscle dysmorphia (Pope et al., 1997; Pope et al., 2000). Individuals with muscle dysmorphia are pathologically preoccupied

an all three equatries preferred an ideal body that was a mean of approximately

with their appearance to the point they become obsessed with weightlifting and dieting, resulting in significant impairment or distress in their daily lives (Pope et al., 1997).

Several studies have shown that men with muscle dysmorphia and weightlifters with symptoms of the disorder possess different characteristics from normal weightlifters and other athletes. Olivardia, Pope, and Hudson (2000) interviewed men with muscle dysmorphia and normal comparison weightlifters, and found that men with muscle dysmorphia differed from the normal comparison weightlifters on body dissatisfaction, eating attitudes, prevalence of anabolic steroid use, lifetime prevalence of *Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition* (DSM-IV, APA, 1999) mood and anxiety disorders, and eating disorders.

Blouin and Goldfield (1995) found similar results when they compared bodybuilders to runners and martial artists. Participants included 43 bodybuilders, 48 runners, and 48 martial artists approached at athletic centers. Participants completed the Eating Disorder Inventory (Garner, Olmstead, & Polivy, 1983), Beck Depression Inventory (Beck, Ward, & Mendelson, 1961), Rosenburg Self-Esteem Scale (Rosenberg, 1965), a modified version of the Anabolic Steroid Questionnaire (Chng & Moore, 1990), and three participation questionnaires. They found that bodybuilders reported significantly greater body dissatisfaction, with both a high drive for bulk, F = 43.34, p < .01, and high drive for thinness, F = 6.18, p < .01, than either the runners or martial artists. Additionally, bodybuilders reported the use of anabolic steroids for the purpose of improving looks by putting on muscle mass in the form of bulk. Results suggest that bodybuilders are more dissatisfied with their bodies to the point they become obsessed with building muscle by weightlifting or using steroids.

Pope et al. (2000) examined the body image of 65 men in France, 54 men in Austria, and 81 men in the United States by instructing participants to indicate their current body shape, ideal body shape, the body of an average man their age, and the male body they believe women prefer. Results indicated that men from all three countries preferred an ideal body that was a mean of approximately

28 pounds more muscular than their current body size. Men also estimated that women would prefer a male body approximately 30 pounds more muscular than their current size, although women actually preferred a male body without added muscle. This study suggests that men are dissatisfied with their bodies; however, unlike women, men desire to be more muscular. Eating Disorders and Muscle Dysmorphia

eight even when they were not and desired to be

Muscle dysmorphia is strikingly similar to cases of anorexia nervosa among women who perceive themselves as being overweight even though they are thin. The difference is that men perceive themselves as being too small even though they are quite muscular (Pope, Katz, & Hudson, 1993). It has even been suggested that both disorders reflect "the cultural expectations of the individual's group" (Pope et al., 1993, p. 408). Muscle dysmorphia appears to be related to anorexia nervosa in several ways. Both disorders are characterized by a consuming preoccupation with perceived bodily defects resulting in such behaviors as an endeavor to hide the defects, abnormal eating behaviors, and excessive exercise. However, individuals with anorexia nervosa perceive themselves as overweight. In response, these individuals develop "primary pathological patterns of eating and only secondarily pathological patterns of exercise" (Pope et al., 1997, p. 551). On the other hand, individuals with muscle dysmorphia become obsessed with achieving greater muscularity. As a result, these individuals "develop a primary focus on exercise with only a secondary focus on diet" (Pope et al., 1997, p. 551). In essence, both muscle dysmorphia and anorexia nervosa may be analogous types of body image disturbance (Pope et al., 1993) in which individuals "have taken the cultural standards of bodily perfection to the extreme" (Davis & Scott-Robertson, 2000, p. 33).

Body Dissatisfaction in Men and Women

With increased awareness about the negative implications of body dissatisfaction in both men and women, researchers have recently begun investigating gender differences in body image. Lofton and Bungum (2001) investigated attitudes toward weight and body shape in 525 male and female

undergraduate students by administering a 52-item questionnaire in addition to the Eating Disorders Inventory, the Social Physique Anxiety Scale (Hart, Leary, & Rejeski, 1999), and the Restraint Scale (Herman & Polivy, 1975). They found that women perceived themselves to be larger than they actually were and desired to be thinner even when they were underweight or normal weight. Additionally, men perceived themselves as underweight even when they were not and desired to be heavier. Results suggest that both men and women are dissatisfied with their bodies; however, women desire to be thin while men desire to be heavier.

In the literature, several techniques exist for measuring body image. Currently, the most popular technique is to present participants with a series of figure drawings of varying sizes and shapes and instruct them to select their current and ideal body size. Body dissatisfaction is measured by determining the difference between the current and ideal figures chosen (Stevens & Tiggemann, 1998). In a classic study, Fallon and Rozin (1985) presented a series of line drawings that depicted men and women ranging on a continuum from extremely thin to extremely obese to 227 female and 248 male undergraduates in introductory psychology classes at the University of Pennsylvania. Participants were instructed to choose the figure that most closely resembled their current body size, their ideal figure, the figure they believed the opposite sex would find most attractive, and the figure of the opposite sex they found most attractive. Results of this study suggest that women desired to be thinner than they actually were, M = 0.86, SD = 0.84, t(247) = 15.32, p < .001. Women also believed that men would find a thinner woman more attractive than men actually reported, M = -0.35, $X^{2}(3)$, N = 469) = 46.62, p < .001. On the other hand, men believed women would find a larger man more attractive than women actually reported, M = 0.28, X^2 (3, N = 468) = 20.00, p < .001; however, there was not a significant discrepancy between the current figure selected by men and the ideal body shape selected, F(1, 108) = 70.9, p < .0001. Results suggest that women are more dissatisfied with their bodies than men; therefore, they feel greater pressure to conform to cultural expectations of the s area to used primarily on women. This is not surprising considering the pl thin-ideal.

Forbes et al. (2001) measured body dissatisfaction in 65 male and 141 female volunteers, age 18 to 40 years, in introductory psychology classes at Millikin University. Most of the participants were middle-class European Americans currently in their freshman and sophomore years of college. Using a methodology similar to that of Fallon and Rozin (1985), participants viewed nine line drawings ranging on a continuum from thin to obese. Forbes et al. found that women perceived themselves to be larger than they actually were, t(140) = 13.12, p < .001, and they believed men would find a thinner figure more attractive than men actually reported, t(204) = 5.70, p < .001. Similar to Rozin and Fallon (1985), Forbes et al. found no discrepancy between men's current and ideal figure, nor did they find a discrepancy between the figure men believed women would find most attractive and the figure women actually reported. These results suggest that while women are dissatisfied with their bodies, generally desiring to be thinner, men appear to be satisfied with their body shape.

Using similar methodology, Demarest and Allen (2001) examined gender differences in body image in 120 male and female college students in the United States using figure drawings ranging from thin to heavy. Results suggested that women tended to be most dissatisfied with their bodies. However, men and women misjudged the figure the opposite sex would choose as most attractive. Women believed men would prefer thinner shapes than men actually reported, while men believed women would prefer more muscular shapes than women actually reported. Results from this and similar studies suggest that women are more dissatisfied with their bodies than men when viewing figures ranging from thin to obese. Additionally, both genders misjudged the figure the opposite sex would find most attractive, which also suggests that both genders misperceive which body shape is considered attractive by the opposite sex.

Limitations of Existing Research

Limitations of current research warrant further investigation of body image. Until recently, research in the area focused primarily on women. This is not surprising considering the phenomenon

of body image disturbance and eating disorders was thought to be an exclusive problem among females. In light of evidence that males were also concerned about their physical appearance, studies were also conducted involving males and body image. However, many of these studies, such as Demarest and Allen (2000), Forbes et al. (2001), Rozin and Fallon (1985), and Smith et al. (2001) used figure drawings ranging on a continuum from thin to obese. Results from this and similar studies yielded conflicting results. When given a choice of figure drawings ranging on a continuum from thin to obese, it is difficult for men to accurately choose their ideal body size. More recent studies have taken into account the muscular dimension. Pope et al. (2000) took into account the muscular dimension when investigating body image in men; however, the study only involved men. The Present Study

The present study extended current research by investigating body image of both men and women. In addition, figure drawings used range on a continuum from obese to thin to muscular. Consistent with previous research in the area, it was hypothesized that women report that they want to be thinner than they currently are and believe men find a thinner woman to be more attractive than men actually report. Men report that they want to be more muscular than they currently are and believe that women find a more muscular man to be more attractive than women actually report.

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Participants

Participants in this study were 22 male and 50 female undergraduates, 18 years and older, recruited from psychology classes. Participants were not assessed for the presence or absence of body image disturbance or eating disorders prior to the experiment.

Design

The design for this study was a between subjects design (comparing the figure men and women believe the opposite sex would find most attractive and the actual figure men and women report as most attractive) and a within subjects design (comparing male and female ideal scores with their actual scores). The independent variables in this study were gender (male or female) and the type of rating (current, ideal, opposite sex ideal, and opposite sex attractiveness). The dependent variable was the figure drawing that the participants selected.

Measures

For this experiment, two sets of figure drawings, adapted from Stunkard, Sorensen, and Schulsinger (1993), were developed. Male and female figure drawings varied in both apparent body fat and muscle mass. The figures ranged from extremely thin (Figure 1) to extremely obese (Figure -9) and from extremely thin (Figure 1) to extremely muscular (Figure 9).

Procedure

Each participant was asked to read and sign an informed consent document prior to participation in the experiment. After signing the informed consent document, participants were asked to estimate their current weight and height by self-report. Participants were then presented with the male and female figure drawings. Participants viewed same sex figure drawings and were asked to respond to three questions: a) Which figure most closely resembles your body shape?; b) Which

figure best represents your ideal body shape?; and c) Which figure do you think the opposite sex will find most attractive? Finally, participants were presented with figure drawings of the opposite sex and instructed to indicate which figure they find most attractive. Upon collection of the data, participants were debriefed and dismissed from the experiment.

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CHAPTER 3

RESULTS a figure that seen report as most attractive Using a paired t-test to analyze the data, Table 1 shows statistically significant differences between women's current and ideal body shape, t(49) = -3.615, p < .001.

ons Setween Men and Women's Perceptions of the Ideal. Table 1 Mean Differences and Paired t-test Between Women's Current and Ideal Figure

	n		M	1	
Current	50	50	-2.480	-0.500	3.190
Figure			-2.400	-3.615	.001
Ideal Figure	50		-0.320	0.545	4.137

Results suggest that women report their ideal body shape ($\underline{M} = -0.320$) as thinner than their current body shape ($\underline{M} = -2.480$).

Table 2 reveals statistically significant differences between men's current and ideal body shape, t(21) = -4.67, p < .0005.

stically significant differences between men's perceptions of the male

Table 2 rest as most attractive, t(70) = -2.018, p < .05. Mean Differences and Paired t-test Between Men's Current and Ideal Figure

	n	<u>M</u>	•	Р
Current Figure	22	1.136	-4.666	.0005
ldeal Figure	22	6.091		

Results of the paired t-test indicate that men report their ideal body shape ($\underline{M} = 6.091$) as more muscular than their current body shape ($\underline{M} = 1.136$).

Using a two-groups t-test to analyze the data, Table 3 shows the mean differences and standard deviations of women's perceptions of the female figure that men report as most attractive.

Table 3

Mean Differences and Standard Deviations Between Men and Women's Perceptions of the Ideal Female Body Shape

	n	W	<u>SD</u>
Women's Perception of Men	50	-0.500	3.190
Men Actually Reported	22	0.545	4.137

The results did not show a statistically significant difference at the p < .05 level between the figure of the female that women believed men would find most attractive and the female figure that men reported as attractive. These results indicate that female perceptions of the figure that men report as most attractive is quite accurate.

Table 4 revealed statistically significant differences between men's perceptions of the male figure that women report as most attractive, t(70) = -2.018, p < .05.

Table 4

Mean Differences and Standard Deviations Between Men and Women's Perceptions of the Ideal

Male Body Shape

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	n	M	<u>SD</u>
Women Actually Reported	50	5.560	2.873
Men's Perception	22 day dison	6.818	0.733
of Women	Temprost and Alies (2001), Storetts and Tiggs	man (1998) and Rozin

Results of a two-groups t-test indicate that men believe that women find a more muscular figure to be attractive ($\underline{M} = 6.818$, $\underline{SD} = 0.733$) than women actually report ($\underline{M} = 5.560$, $\underline{SD} = 2.873$).

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that women's judgments of men's perceptions of the ideal femals

true. Results from this study conflict with results obtained from previous

ad Allen (2001) and Fallon and Rozin (1985). These conflicting results

s such as the types of drawings used in the study as well as the sample

students who may be characteristically different from individuals in the

CHAPTER 4 s that men misperceive the male figure that

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Results from this study support the hypothesis that women desire to be thinner than they currently are. Previous research involving body dissatisfaction indicates that societal and cultural pressures for women to attain the thin-ideal is at least partially responsible for body dissatisfaction and an increase in the incidence of eating disorders among women. This study provides further support for the studies of Demarest and Allen (2001), Stevens and Tiggemann (1998) and Rozin and Fallon (1985), which suggest that women are dissatisfied with their bodies and desire to be thinner.

Results from this study also support the hypothesis that men desire to be more muscular than they currently are. Although body image concerns have been considered a female phenomenon, recent research indicates that body image concerns are relevant to males. In fact, mounting evidence indicates that societal and cultural pressures for men to obtain the ideal muscular male body are associated with an increase in body dissatisfaction and the increased incidence of muscle dysmorphia among men. This study provides further support for results obtained by Pope et al. (2000) and suggests that men are dissatisfied with their bodies and desire to be more muscular.

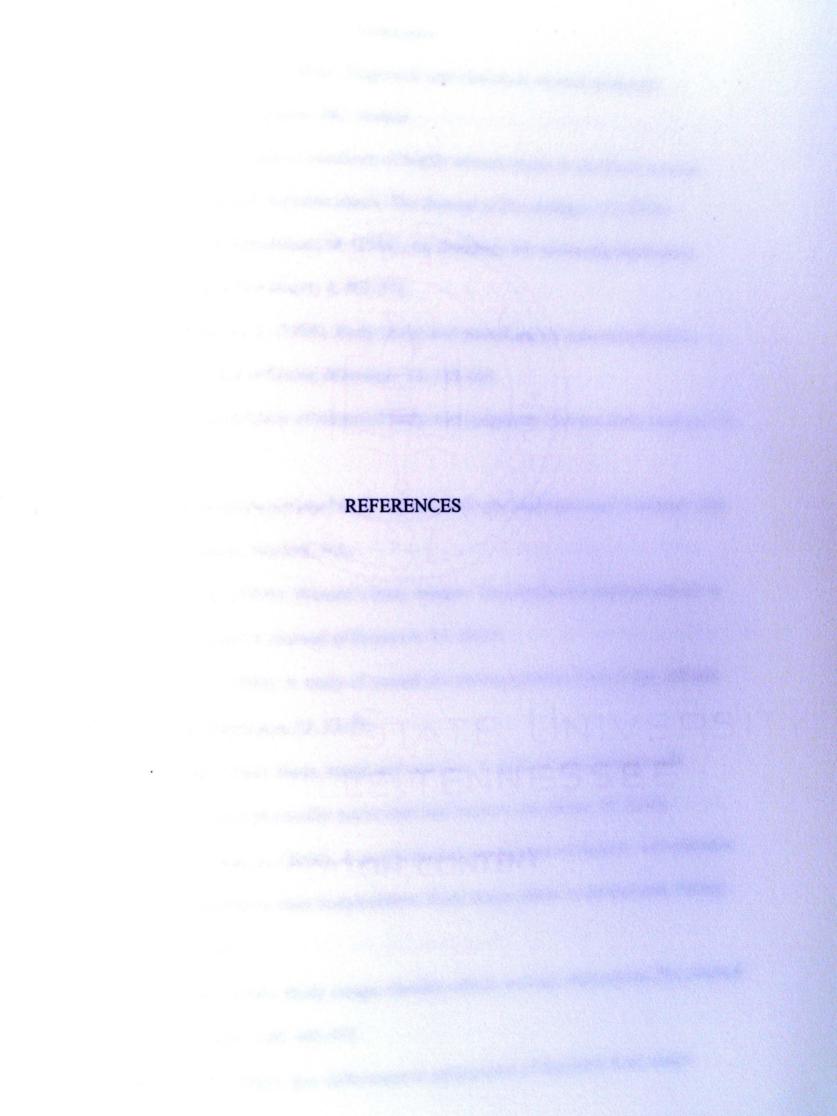
Contrary to recent research, results from this study do not support the hypothesis that women misperceive the female figure that men find most attractive. Previous research indicates that women report that men find a thinner female figure to be more attractive than men actually report. However, results from this study suggest that women's judgments of men's perceptions of the ideal female body shape are quite accurate. Results from this study conflict with results obtained from previous studies such as Demarest and Allen (2001) and Fallon and Rozin (1985). These conflicting results may be explained by factors such as the types of drawings used in the study as well as the sample size being limited to college students who may be characteristically different from individuals in the general population. Future research should utilize computer-generated figures in order to allow participants to choose from a greater variety of more realistic body shapes.

Final results from this study support the hypothesis that men misperceive the male figure that women find most attractive. Results from this study indicate that men perceive women as finding a more muscular male figure to be more attractive than women actually report. These results provide further support for the results obtained from the studies of Demarest and Allen (2001) and Pope et al. (2000) and suggest that men misperceive the male figure that women find most attractive.

Additionally, results suggest that men may be dissatisfied with their body shape and desire to be more muscular because they believe that women find a more muscular figure to be attractive.

Limitations of this study include small sample size and generalizability of the results.

Participants were student volunteers from undergraduate psychology classes; therefore, the sample size is limited to the 72 students who volunteered to participate in the study. Additionally, participants in this study were college students who may be characteristically different from the general population; therefore, results of this study may not be generalizable to the general population.



References

- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.
- Barber, N. (1998). Secular changes in standards of bodily attractiveness in american women: Different masculine and feminine ideals. *The Journal of Psychology*, 132, 87-94.
- Beck, A. J., Ward, C. H., & Mendelson, M. (1961). An inventory for measuring depression.

 Archives of General Psychiatry, 4, 561-571.
- Blouin, A. G., & Goldfield, G. S. (1995). Body image and steroid use in male bodybuilders.

 International Journal of Eating Disorders, 18, 159-165.
- Brewis, A. A. (1999). The accuracy of attractive body-size judgment. *Current Anthropology*, 40, 548-558.
- Cash, T. F. (1994). The multidimensional body self-relations questionnaire user's manual. Old Dominion University, Norfolk, VA.
- Cash, T. F., & Henry, P. E. (1995). Women's body images: The results of a national survey in the U.S.A. Sex Roles: A Journal of Research, 33, 19-29.
- Chng, C. L., & Moore, A. (1990). A study of steroid use among athletes: Knowledge, attitude, and use. *Health Education*, 21, 12-17.
- Davis, C., & Cowles, M. (1991). Body image and exercise: A study of relationships and comparisons between physically active men and women. Sex Roles, 25, 33-44.
- Davis, C., & Scott-Robertson, L. (2000). A psychological comparison of females with anorexia nervosa and competitive male bodybuilders: Body shape ideals in the extreme. *Eating Behaviors*, 1, 33-46.
- Demarest, J., & Allen, R. (2000). Body image: Gender, ethnic, and age differences. *The Journal of Social Psychology*, 140, 465-473.
- Fallon, A. E., & Rozin, P. (1985). Sex differences in perceptions of desirable body shape.

- Journal of Abnormal Psychology, 94, 102-105.
- Forbes, G. B., Adams-Curtis, L. E., Rade, B., & Jaberg, P. (2001). Body dissatisfaction in women and men: The role of gender-typing and self-esteem. Sex Roles: A Journal of Research, 461-486.
- Garner, D. M., Olmstead, M. D., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia and bulimia. *International Journal of Eating Disorders*, 2, 15-32.
- Hart, E. A., Leary, M. R., & Rejeski, W. J. (1989). The measurement of social physique anxiety.

 Journal of Sport & Exercise Psychology, 11, 94-104.
- Herman, C. P., & Polivy, J. (1975). Anxiety, restraint, and eating behavior. *Journal of Abnormal Psychology*, 84, 666-672.
- Leit, R. A., Pope, H. G., & Gray, J. J. (2000). Cultural expectations of muscularity in men: The evolution of playgirl centerfolds. *International Journal of Eating Disorders*, 90-93.
- Lofton, S., & Bungum, T. (2001). Attitudes and behaviors toward weight, body shape, and eating in male and female college students. Research Quarterly for Exercise and Sport,_72, A-32.
- McClelland, S. (1999). The lure of body image: In their quest for the beefcake look, some men try extreme measures. *Maclean's*, 38.
- Norton, K. I., Olds, T. S., Olive, S., & Dank, S. (1996). Ken and Barbie at life size. Sex Roles, 34, 287-294.
- Olivardia, R., Pope, H. G., & Hudson, J. I. (2000). Muscle dysmorphia in male weightlifters: A case-control study. *American Journal of Psychiatry*, 57, 1291-1296.
- Parks, P. S. M., & Read, M. H. (1997). Adolescent male athletes: Body image, diet, and exercise.

 Adolescence, 32, 593-603.

- patel, K. A., & Gray, J. J. (2001). Judgment accuracy in body preferences among african americans. Sex Roles: A Journal of Research, 227-232.
- Pedersen, E. L., & Markee, N. L. (1991). Fashion dolls: Representation of ideals of beauty.

 Perceptual and Motor Skills, 73, 93-94.
- Pope, H. G., Katz, D. L., & Hudson, J. I. (1993). Anorexia nervosa and "reverse anorexia" among 108 male bodybuilders. *Comprehensive Psychiatry*, 34, 406-409.
- Pope, H. G., Gruber, A. J., Choi, P., Olivardia, R., & Phillips, K. A. (1997). Muscle dysmorphia:

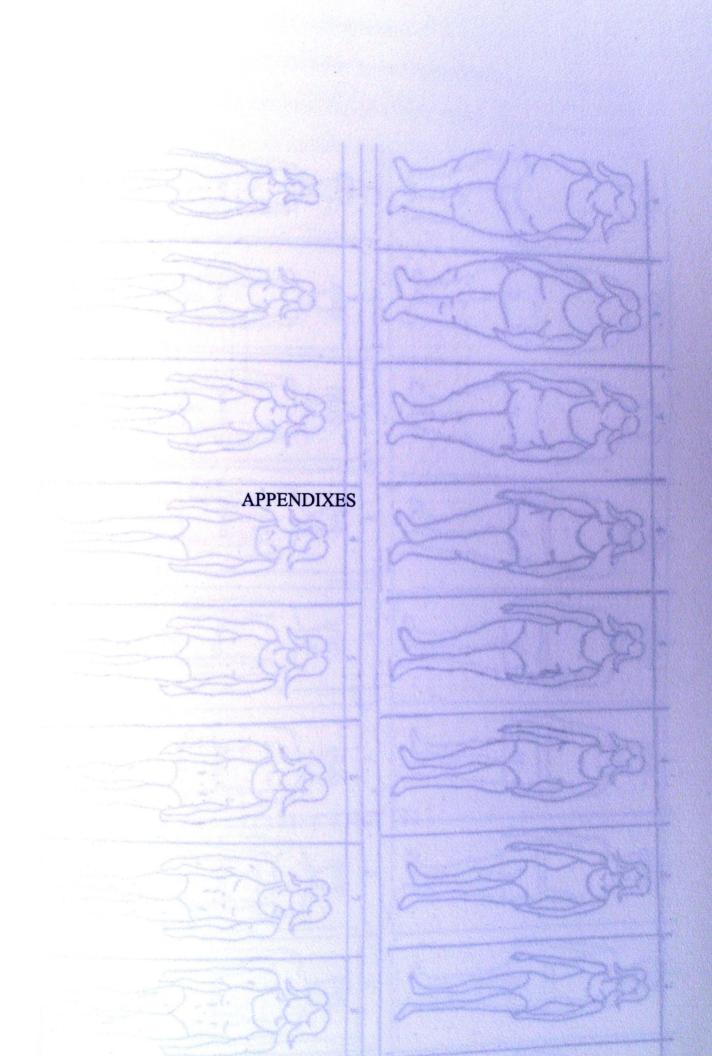
 An underrecognized form of body dysmorphic disorder. *Psychosomatics*, 38, 548-557.
- Pope, H. G., Olivardia, R., Gruber, A., & Borowiecki, J. (1999). Evolving ideals of male body image as seen through action toys. *International Journal of Eating Disorders*, 26, 65-72.
- Pope, H. G., Gruber, A. J., Mangweth, B., Bureau, B., deCol, C., Jouvent, R., & Hudson, J. (2000). Body image perception among men in three countries. *American Journal of Psychiatry*, 157, 1297-1301.
- Pope, H. G., Olivardia, R., Borowiecki, J. J., & Cohane, G. J. (2001). The growing commercial value of the male body: A longitudinal survey of advertising in women's magazines.

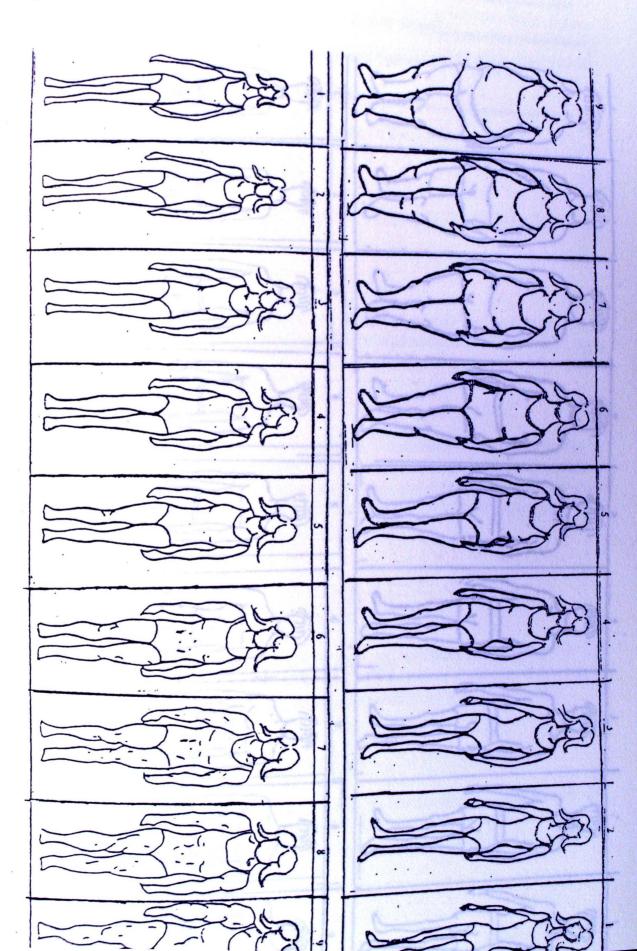
 Psychotherapy and Psychosomatics, 70, 189-192.
- Rosenberg, M. (1965). The self-perceptions inventory. Society and the adolescent self-image.

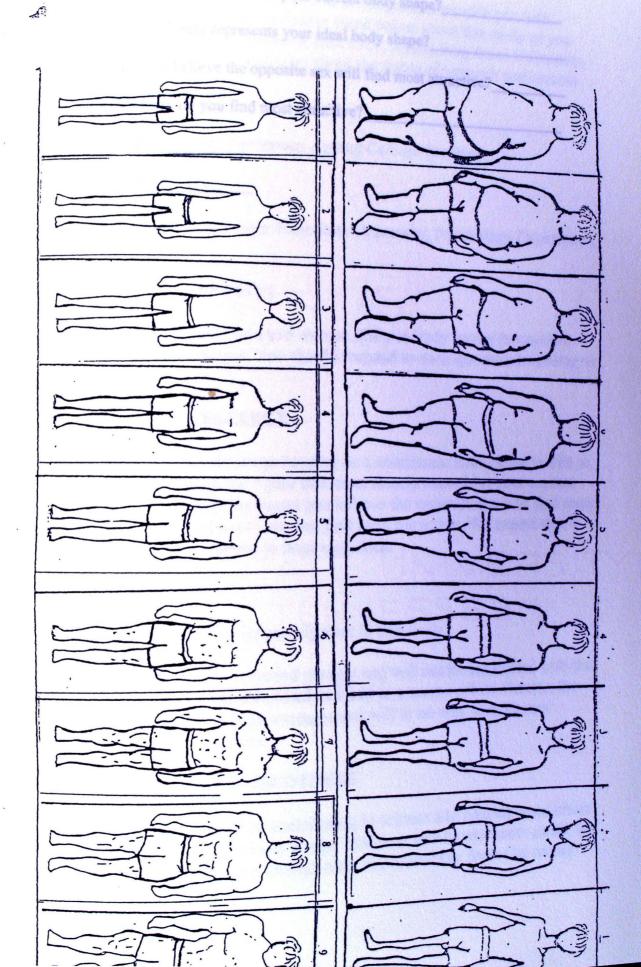
 Princeton, NJ: Princeton University Press.
- Silverstein, B., Perdue, L., Peterson, B., & Kelly, E. (1986). The role of the mass media in promoting a thin standard of bodily attractiveness for women. Sex Roles, 14, 519-532.
- Smith, J. L., Parr, R. B., & Bells, J. (2001). The effects of magazine portrayals of men on the body image of college males. Research Quarterly for Exercise and Sport, 72, A-35.
- Spitzer, B. L., Henderson, K. A., & Zivian, M. T. (1999). Gender differences in population versus media body sizes: A comparison over four decades. Sex Roles: A Journal of Research, 40, 545.

- Stevens, C., & Tiggemann, M. (1998). Women's body figure preferences across the life span.

 Journal of Genetic Psychology, 159, 94-102.
- Stice, E., & Shaw, H. E. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. *Journal of Social and Clinical Psychology*, 13, 288-308.
- Stunkard, A., Sorensen, T., & Schulsinger, F. (1980). Use of the Danish adoption register for the study of obesity and thinness. In S. Kety (Ed.). *The genetics of neurological and psychiatric disorders* (pp. 115-120). New York: Raven Press.
- Thornton, B., & Maurice, J. (1997). Physique contrast effect: Adverse impact of idealized body images for women. Sex Roles: A Journal of Research, 37, 433-440.
- Touyz, S. W., Beumont, P. J. V., Collins, J. K., & Cowie, I. (1985). Body shape perception in bulimia and anorexia nervosa. *International Journal of Eating Disorders*, 4, 259-266.
- Wilkinson, D. Y. (1987). The dolls exhibit: A psycho-cultural analysis of black female role stereotypes. *Journal of Popular Culture*, 21, 19-29.
- Williams, L., & Depcik, E. (2001). Effects of weight training on body satisfaction among body image disturbed college women. Research Quarterly for Exercise and Sport, 72, A-91.
- Wiseman, M. A., Gray, J. J., Mosimann, J. E., & Ahrens, A. H. (1992). Cultural expectations of thinness in women: An update. *International Journal of Eating Disorders*, 11, 85-89.







Appendix C

Questions and Responses

1. Which figur	e (same-sex) most closely resembles your current body shape?
	e (same-sex) most closely represents your ideal body shape?
3. Which figur	e (same-sex) do you believe the opposite sex will find most attractive?
	e of the opposite sex do you find most attractive?
5. What is you	r current weight?aaaa Porception Among College Students
6. What is your	current height?
Please circle ge	ender: Austin Peay State University, Psychology Departu
Male	Female

NEFSEARCH

or responses. You should respond to each question according to

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Appendix D

Informed Consent Document

You are asked to participate in a research study. This form is designed to provide you with information about this study. You may ask the researcher listed below about this study or you may call the office of Grants and Sponsored Research, Box 4517, Austin Peay State University, Clarksville, TN 37044, (931) 221-7881 with questions about the rights of research participants.

1. TITLE OF RESEARCH STUDY

Gender Differences in Body Image Perception Among College Students

2. PRINCIPLE INVESTIGATOR

Stacey Coulter, Graduate Student, Austin Peay State University, Psychology Department, Clarksville, TN.

3. THE PURPOSE OF THE RESEARCH

This study will seek to determine if men and women differ in body image perception. There are no right or wrong responses. You should respond to each question according to your own beliefs and feelings.

4. PROCEDURES FOR THIS RESEARCH

You will be asked to view figure drawings ranging on a continuum from obese to thin to muscular, and instructed to choose the figure that most closely resembles your current body shape, your ideal body shape, the figure you believe the opposite sex will find most attractive, and the figure of the opposite sex you find most attractive. We expect that it will take about 5-10 minutes to respond to these questions.

5. POTENTIAL RISKS TO YOU

There are minimal risks associated with participation in this study.

Your name will only appear on this informed consent and will not be associated with the response sheet. All data will be kept under lock and key in a secure office. Finally, the data will only be made available through averages and will in no way identify any individual who has chosen to participate.

6. POTENTIAL BENEFITS TO YOU OR OTHERS

As a participant in the study, you will be contributing to science and helping researchers gain insight into gender differences in body image. You may also receive extra credit for participation if you are enrolled in a psychology class at Austin Peay State University.

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Stacey Coulter was born in Clarksville, Tennessee on July 10, 1978. She attended elementary and middle school in the Clarksville-Montgomery School System and graduated from Northeast High School in May, 1996. The following August she entered Austin Peay State University and in May 2000 received the degree of Bachelor of Science in Psychology. In August, 2000 she entered Austin Peay State University and in December 2002 received a Master of Arts degree in Clinical Psychology.