# The Relationship between Body Image and Self-Esteem among Undergraduates 

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The Relationship Between Body Image and Self-Esteem Among Undergraduates

by<br>Steven C. Abell

Thesis Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Master of Arts

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## VITA

The author, Steven Charles Abell, is the son of Joseph and Bonnie Abell. He was born April 26, 1962, in Oklahoma City, Oklahoma.

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## INTRODUCTION

A great deal of psychological research has attempted to study the relationship between body image and self-esteem, with many aspects of a person's body image and self-concept being measured. In recent years, researchers have begun to look at the specific issue of thinness vs. fatness, and at how satisfaction with the shape of one's body can affect self-esteem. This has been an important matter for psychologists to investigate, since our society has often been described as one that is obsessed with the issues of weight and body shape (Faust, 1982). Yet despite the tremendous amount of work that has been done, certain vital questions in this area remain unanswered.

The present study thus investigated several predictions about how feelings regarding weight and body shape would be related to self-esteem. In general, females were expected to be less satisfied than males with their body image, and to have a stronger relationship between body shape satisfaction and selfesteem. It was also thought that the relationship between satisafaction with body shape and self-esteem would be particularly strong for women who were from families of higher socio-economic status . Finally,
it was also predicted that an individual's reported range of activities would be related to their selfesteem and body shape satisfaction. Individuals who reported a high range of activities were expected to have more positive feelings about themselves and their bodies.

## REVIEW OF THE RELATED LITERATURE

## Early History of Research:

Kretschmer (1925) was one of the first modern psychologists to address the relationship between body type and personality directly. Kretschmer developed his own body build classification system of ectomorphs, mesomorphs, and endomorphs, and speculated that differences in temperament and even mental illness existed among groups differentiated on the basis of body build. Sheldon (1940) also developed a classification system, and suggested that a significant relationship exists between somatotype and temperament. While the work of both Kretschmer and Sheldon originally caused a great deal of excitement within the field of psychology, their theories ultimately proved to be somewhat disappointing. Empirical research has failed to support the idea that a strong relationship exists between an individual's somatotype and their personality characteristics (Mischel, 1968). Despite the failure of the early somatotype theories to withstand empirical testing, psychologists have continued to try to understand the relationship between physique and personality. Within the past thirty years, the emphasis
has shifted from looking at the actual size of someone's body, to considering the subjective feelings and associations that a person may have about their physique. Somatotype research gradually has given way to body image research. If scientists want to know how a person's body affects them psychologically, it makes sense to ask that individual how they perceive their body. Then one can begin to understand how the subjective feelings that an individual has about their physique, relates to other psychological issues. In this manner, contemporary psychologists have attempted to correlate body image with a large number of variables. One of the most widely studied of these has been the notion of self-esteem.

Secourd and Jourard (1953) were among the first who really attempted to correlate body image and selfesteem in this manner. This research team had college students fill out a body satisfaction scale, as well as a self satisfaction scale, and then correlated the overall scores for these measures (for girls $\underline{r}=.58$; for boys $\underline{r}=.66$, $\mathrm{p}<.01$ ). The two scales proved to be highly reliable (Mayer \& Eisenberg, 1982), and led Secourd and Jourard to conclude "that valuation of the body and the self tend to be commensurate" (p.346).

The moderately strong correlations found by secourd and Jourard (1953), however, were viewed by others as due to satisfaction response sets, rather than to a real relationship between the two variables. In order to test this idea, Rosen and Ross (1968) repeated secourd and Jourard's work, but with a new element. First, Rosen and Ross had their subjects indicate on a Likert-type scale how satisfied they were with different body parts, and also with 17 adjectives describing an individual's self. This was similar to the work of secourd and Jourard. But then each subject of Rosen and Ross was also asked to rate how important each particular aspect of their body and self-concept was to them. With this data, the overall, mean correlation between body image and self-concept was found to be . 52 . But for those aspects that subjects rated above the mean importance, the overall correlation was .62 , while for those aspects of body and self rated below the mean importance, it was only .28. Rosen and Ross felt that these findings gave added support to the work of secourd and Jourard. For if subjects were merely expressing response sets, then "there would be no reason to expect a change in the magnitude of the correlation as the importance of items varied, unless importance and satisfaction were correlated. This was not the case,
for a separate analysis showed these two variables to be independent" (Rosen \& Ross, p.100). Rosen and Ross felt that their study revealed that satisfaction with body image and satisfaction with self-concept are positively related. Since the work of Rosen and Ross (1968), psychologists have gone on to do a tremendous amount of research on body image and self-esteem, tracing the relationship between these two variables across the human lifespan.

## Childhood to the Beginning of Adolescence:

Even in early childhood, there is a considerable amount of evidence that a meaningful correlation already exists between body image and self-esteem. Stager and Burke (1982) found this to be the case, when they studied over 400 middle-class, primary school children. Stager and Burke discovered that the self-concept variables of physical appearance, popularity, as well as intellectual and school status, were all negatively correlated with perceptions of fatness.

These findings seemed to support and earlier study by Lerner and Korn (1972), who looked at the development of body build stereotypes in male children. Lerner and Korn studied males who were 5-6 years old, 14-15 years old, and 19-20 years old. Subjects in these different
groups were asked to attribute items from a verbal checklist to either a picture of an endomorph, a mesomorph, or an ectomorph. "Results indicated that at all age levels subjects held a predominantly favorable view of the mesomorph, a markedly unfavorable view of the endomorph, and a somewhat less negative but still unfavorable view of the ectomorph" (Lerner \& Korn, p.908). The mesomorph was often described as "clean" and "smart," while subjects assigned terms like "dirty" and "stupid" to the endomorph. So Lerner and Korn's study suggests that by the age of 6 , males have already formed fairly strong body build stereotypes, and that these stereotypes remain relatively stable into early adulthood. With such strong prejudices operating continuously throughout a young person's life, it is not surprising that perceptions of one's body are related to overall self-esteem.

For obese children, research has shown that this relationship may become an especially important and painful one (Mendelson \& White, 1985). In a study of obese and normal elementary school children, Mendelson and White (1982) found that "body-esteem and self-esteem were related similarly for the obese and the normal children" (p.902). But this research team also found that the variable of body-esteem was significantly
related to weight, with the more obese children having lower body-esteem. It seems that the obese children had negative views of their bodies, and in many cases also had low opinions of themselves in general. While this situation is surely an unhappy one for obese elementary school children, it may only become worse as they enter early adolescence. In a latter study, Mendelson and White (1985) found that at puberty the body-esteem scores of obese youngsters tended to fall even lower. For the pubertal subjects in this latter study, the mean correlation between relative weight and self-esteem was significant, with obese adolescents having lower selfesteem scores. Mendelson and White (1985) believe that this may be an indication of how the significant relationship between body image and self-esteem, that is already present during childhood, becomes even more powerful during puberty. The large body of research that has been done with young adolescents, may be helpful in determining the validity of this notion.

## Puberty and Adolescence:

Mendelson and White (1985) may have been reasonably justified in believing that the relationship between body image and self-esteem continues to develop during puberty, since a strong correlation between these
two variables generally has been found for the early adolescent age group (Tobin-Richards, Boxer, and petersen, 1982). A gender difference also appears to emerge at this stage of the lifespan. While researchers like Lerner and Korn (1972) have shown how strongly body build stereotypes operate in adolescent boys, quite a bit of psychological research indicates that the connection between body image and self-esteem is even more powerrful for adolescent girls (Tobin-Richards et al.). At this developmental level, physical appearance seems to become extremely important to females. In a review of the literature on physical attractiveness, Bar-Tal and Saxe (1976) concluded that attractive individuals are better perceived on a wide range of dimensions, than are less attractive individuals. These authors also concluded that this effect is significantly more pronounced for females than males. It may well be, that puberty is the time of life when these social prejudices begin to operate. While researchers of childhood such as Stager and Burke (1982) have found relatively similar correlations between body image and self-esteem for pre-pubertal boys and girls, with the onset of adolescence a sex difference emerges.

Part of this change, may come about because of the greater concern that adolescent girls begin to have
about their weight. Many authors have commented upon how our society encourages women to emulate what Faust (1982) has called "the lean, lithe look ... the benchmark of feminine beauty today ... the pre-pubertal look" (p.115) (Dion, Bersheid, \& Walster, 1972 ; Langlois \& Stephan, 1981). Evidence suggests that striving for this particular look is what causes adolescent girls to become dissatisfied with their weight. In a study of over 5000 adolescents, Duncan, Ritter, Dornbusch, Gross, and Carlsmith (1985) found that most girls tended to be satisfied with their weight until they entered puberty. It was only as girls entered puberty, that many of them began to report dissatisfaction with their weight. Of course as a girl begins her pubertal development, she naturally begins to gain weight, and to find that the shape of her body is changing. She begins to develop the body of a mature woman. It becomes impossible for many girls to maintain the thin, overly svelte look that Faust has described. Thus many adolescent girls begin to place a great emphasis on their weight, as they strive to meet an often unrealistic cultural ideal.

Several research studies have found a significant relationship between the variables of weight and feelings of overall attractiveness in pubertal girls.

Tobin-Richards, Boxer, and Petersen (1983) found a positive, linear relationship to exist between satisfaction with weight and body image. The adolescents in this study who were satisfied with their weight also tended to be satisfied with their body image. Tobin-Richards et al. also found evidence that tended to support the hypothesis that adolescent females are strongly affected by our culture's emphasis on thinness. The girls in this study were most satisfied with their weight when they perceived themselves to be underweight, in contrast to the boys who wanted primarily to be of average weight. Some differences also appeared to emerge between girls who were from different cultural communities, but the cause of this was unclear. Tobin-Richards et. al. did speculate, however, that range of activities may affect the selfesteem of girls. Girls who participate in a smaller number of extracurricular and leisure activities "may be left with appearance as a major concern and source of self-evaluation" (p.11).

In any case, the hypothesized relationship for adolescent girls, between satisfaction with body weight and overall feelings toward the self, has recently been given further support by the work of Sarigiani and Dorn (1986). This research team found that for eighth grade
girls weight satisfaction was significantly correlated with body image, and that weight satisfaction was correlated with emotional tone at the . 001 level of significance. These findings suggest a real preoccupation with weight among young adolescent females.

But it is important to remember, that this female preoccupation with weight and physical appearance may be a largely western phenomenon. In a study of 800 Japanese adolescents, Lerner, Iwawaki, Chihara, and Sorell (1980) obtained results which are in direct contrast to what most western researchers have found. For most of the adolescent age groups in this study, the correlations between perceptions of physical attractiveness and self-esteem were significantly stronger for males than females. While Lerner et al. do not speculate on what aspects of Japanese culture produced these findings, they do point out the real discrepancy between their data and what most western psychologists are obtaining. This discrepancy indicates that the relationship between body image and self-esteem among adolescents may be a highly variable relationship, which can be strongly influenced by many factors such as culture, age, and gender. These factors may continue to influence the relationship between body image and
self-esteem, as adolescents reach their college years.

## The College Years:

As people go through the college years, there is some evidence that the correlations between body image and self-esteem begins to reach parity for the two sexes (McLean, 1976; Lerner, Karabenick, \& Stuart, 1973). McLean did a doctoral dissertation studying both undergraduates and junior high school students, which demonstrated how college students may be different from a younger group. With the junior high school students in this study, there was a significant correlation between body satisfaction and self-esteem for the girls, but not for the boys. Yet for the college students, a significant correlation was found to exist between these two variables for both males and females. This suggests that as men get older, they become more like women, in the sense that their self-esteem is strongly related to feelings of physical attractiveness.

An earlier study by Lerner, Karabenick, and Stuart (1973) gave further credence to this notion, that correlations for men and women reach parity during the college years. This team studied over 300 undergraduates at Eastern Michigan University, and used modified versions of the body image and self-concept
scales of Rosen and Ross (1968). Remarkably, when Lerner et al. correlated self-concept with how satisfied a person was with their weight distribution, males and females had an identical correlation (r=.26, $\mathrm{p}<.01$ ). At the same time, however, the correlation for general appearance with self-esteem was significantly higher for males than females ( $\underline{r}=.39$ for females, $\underline{r}=.22$ for males). These correlations seem to indicate that while preoccupation with weight was reaching parity, women were still more concerned than males about other aspects of their physical appearance.

Padin, Lerner, and Spiro (1981) have shown that these correlations are relatively stable, at least for short periods of time. Padin et al. repeated the measures of Lerner, Karabenick, and stuart (1973), but this time gave all of the measures twice. The subjects being studied were enrolled in eight week long jogging, dance or health education classes. The body image and self-esteem tests were administered both at the beginning and at the conclusion of these physical education courses. Padin et al. hypothesized that gym classes might alter the distribution of scores, and produce low pre-test, post-test correlations. But very high pretest-posttest correlations were obtained for all of the various exercise and health education groups.

The measures originally used by Lerner et al. appear, at least for short periods of time, to produce stable results.

Yet despite the stable and convincing nature of the work done by Lerner, Karabenick, and stuart (1973), and McLean (1976), correlations between body-weight and self-esteem may be quite different for male and female undergraduates today. One point to consider is that the work of Lerner et al. and McLean was done in the early 1970's, when the feminine ideal of the "pre-pubertal look" (Faust, 1982, p.115) was perhaps only beginning to have its full effect. In a more recent study, Mintz and Betz (1986) discovered that while negative attitudes about one's body were related to lower self-esteem scores for both sexes, the relationship was significantly stronger for females. Cultural factors that are no longer relevant may thus have affected the earlier studies of McLean and Lerner, Karabenick, and Stuart. The socio-economic status of subjects in the early studies was also unclear. Nor do we know what type of women served as subjects in these two studies. Neither Lerner et al. nor McLean recorded the age of their subjects, and we do not know if these women were traditional, liberated, conservative, liberal, etc. It may be important to consider if a study's subjects are
traditionally feminine or more androgynous. Kilmicka, Cross, and Tarnai (1983) found that women who scored as relatively androgynous and masculine on the Bem Sex Role Inventory, tended to have high self-esteem scores and be more satisfied with their bodies, than their more conventional female counterparts. Kimlicka et al. interpreted these results as evidence for the adaptive nature of changing female sex roles. They felt that liberated, unconventional women have a wider range of opportunities to develop positive feelings for themselves and for their bodies. Therefore, when researchers are doing a study in this area, it may be very important to look at whether the female subjects are androgynous or traditionally feminine.

Another crucial factor to look at in this kind of research, may be whether you are measuring satisfaction with body weight, or satisfaction with body build (Fallon \& Rosin, 1985). A slightly overweight subject may tell you that they are perfectly satisfied with their body weight. But at the same time, this individual may deeply wish that he or she had a leaner, more muscular look. In order to understand the relationship between body image and self-esteem, it may well be necessary to look at total weight and at weight distribution separately. For in study's which have
attempted to look at weight distribution or body build, some significant sex differences have emerged. While studying undergraduates Fallon and Rozin (1985) found that female subjects preferred significantly thinner same sex figure drawings than the male subjects did. Fallon and Rozin also found that women tended to rate their ideal feminine figure as much thinner than the drawing which they said most closely resembled their current body build. Male subjects, on the other hand, tended to rate their ideal male figures and their actual figures as almost identical. Fallon and Rozin concluded that "men's perceptions serve to keep them satisfied with their figures, whereas women's perceptions place pressure on them to lose weight" (p.102).

This difference may be due to the very thin look, which the female subjects in Fallon and Rozin's (1985) study described as their ideal. The college age subjects of Fallon and Rozin may have simply been older versions of the adolescent girls studied by TobinRichards, Boxer, and Petersen (1983). These adolescent girls were happiest with their figures when they were underweight, and the college women of Fallon and Rozin also wanted to be extremely thin. In contrast to this, the adolescent males that Tobin-Richards et al. studied simply wanted to be of average weight. Likewise, Tucker
(1983) found that college age males also prefer to be mesomorphic. Tucker found that male undergraduates, who perceived their bodies to be muscular and mesomorphic, were significantly happier with their overall body image, than males who perceived themselves as either endomorphic or ectomorphic. By viewing a more realistic, obtainable, mesomorphic figure as their ideal, it seems that males are significantly happier with their body builds from early adolescence to young adulthood.

For this reason, it may be important for selfesteem research to focus on body shape rather than on weight satisfaction in the future. Lerner, Karabenick, and Stuart (1973) significantly contributed to the field when they found equal correlations between weight satisfaction and self-concept for males and females. But focusing on the shape of a person's body or on thinness vs. fatnessd, may be a better way to try to understand sex differences. Satisfaction with one's body build could very well be a specific aspect of body image that strongly relates to self-esteem. Even with the heavily researched undergraduate population, this aspect of body image appears to be neglected and merits further study.

## Beyond the College Years:

The limited amount of research that has been done with older subjects, suggests that the relationship between body image and self-esteem is a relatively stable one by the end of an individual's college years (Kullman, 1978). Researchers who have compared college students with older subjects, have generally found similar (Greenaway, 1985) or even slightly stronger correlations (Howe, 1973) for the older subjects. The existing empirical evidence seems to contradict the popular belief that young people are more concerned with their physical appearance than middle-aged or elderly individuals. As we study the correlation between body image and self-esteem among the young, we may in fact be getting just a taste of the powerful relationship that will eventually develop.

Therefore, it seems reasonable to conclude that a moderate to strong correlation between body image and self-esteem measures generally exist across the human lifespan. Cultural factors may play a tremendous role in shaping the precise nature of the relationship between these two variables, but some type of meaningful relationship between body image and self-esteem has been found in almost all settings. The existing research has done a great deal, in terms of demonstrating the
relationship between these two aspects of the human personality.

## Problems that Plague the Existing Research:

Despite the progress that has been made thus far, serious problems still exist with the empirical research in this area. One major concern is the nature of the fill in the blank questionnaires, that are generally used to measure self-esteem. Probably the two most common of these are the Rosenberg Self-Esteem Scale and the Coopersmith Self-Esteem Inventory. These devices are popular, since they are easy to administer, and have been well-normed with undergraduate populations. SavinWilliams and Jaquish (1981), however, question the usefulness of such self-report inventories. SavinWilliams and Jaquish point out that the manner in which people describe themselves does not always match their actual behavior.

In a research study designed to test this idea, Savin-Williams and Jaquish (1981) had a group of adolescent boys define lists of behaviors that they thought were indicative of either high or low selfesteem. Frequency ratings of these behaviors were then correlated with the boys' scores on two traditional self-esteem questionnaires. Neither of the traditional
measures correlated with the behavioral ratings at even the . 10 level of significance. Such findings led SavinWilliams and Jaquish, as well as such major theorists as Mischel (1979) and Hamlyn (1977), to conclude that pencil and paper measures have little value, and should be replaced with less subjective, direct observations of behavior.

But when these authors advocate totally abandoning the paper and pencil measures, they may be overreacting. These researchers have made a valid point, when they have shown how a person's subjective sense of him or herself does not always match actual behavior. But for clinicians working in the field, a person's subjective sense of him or herself still has real significance. Stories of a high school homecoming queen, who thinks that she is ugly and undesirable, are all too common. For such troubled individuals, their subjective sense of self may be the most important aspect of their emotional lives, regardless of what their actual behavior may be. A person's subjective perceptions of him or herself are important, even if these perceptions are not always reflected in the individual's behavior. It would be unwise for empirical researchers to ignore these feelings and only look at behavior.

So if we want to look at such internal, subjective aspects of human experience, the traditional paper and pencil measures of self-esteem are probably still very useful. The important thing may be to remember exactly what these devices are capable of assessing. Tests like the Rosenberg Self-Esteem Scale and the Coopersmith Inventory measure an individual's conscious, subjective sense of him or herself. This is a valuable thing to study, as long as we realize that this is the aspect of self-esteem that is being assessed.

In the same way that it is important to define the precise aspects of self-esteem that are under investigation, it is also important to specify exactly what aspect of body satisfaction is being measured. In the existing research, it has often been difficult to determine exactly what aspects of a person's body image were being correlated with their self-concept. Researchers like McLean (1976) and Kimlicka, Cross, and Tarnai (1983) have failed to specify the precise aspects of body satisfaction which they were attempting to study. This makes it difficult to determine how body image may in fact be related to self-esteem. Greater specificity of design is needed, for researchers to learn how individuals really feel about particular aspects of their bodies.

It might also be helpful for researchers to look at a few other aspects of human activity in conjunction with these self-esteem studies. Looking at the nature and frequency of a person's activities, may help to sort out the relationship between body image and self-esteem. For example, a teenage girl in the suburbs, who participates in few extracurricular or social activities, may be very dependent on her appearance for feelings of self-worth. A successful and busy corporate executive, on the other hand, may engage in many selfesteem enhancing activities, and thus not be terribly preoccupied with his or her physical appearance. TobinRichards, Boxer, and Petersen (1983) are the only researchers so far who have brought up this idea of range of activities. So this appears to be a matter which warrants further study.

Another salient point which Tobin-Richards, Boxer, and Petersen (1983) also mention is the whole issue of social class and its possible effect upon body image. While clinical lore has long held that the upper classes place a greater emphasis on thinness, little empirical research has been done in this area. Only a few investigators, such as Garner, Garfinkel, and olmstead (1983) and Tobin-Richards et al. have really attempted to compare different socioeconomic groups in a
systematic way. Yet the effect of social class may be an important one to consider. The different activities and values of various socio-economic groups may have a significant impact upon body image. Garner et al. have indicated that a greater emphasis upon thinness does in fact exist among the upper class. This factor could certainly skew the results of a study like the one done by Fallon and Rosin (1985), which used ivy league, primarily middle to upper class college students as subjects. Researchers should take a factor like this into account. The whole notion of social class and its effect upon body image, is an important issue which really has yet to be explored in a comprehensive way. When social class and range of activities are examined, in a project which carefully defines the aspects of body satisfaction and self-esteem that it is studying, then this area will become clearer. Perhaps then we will know more about the exact way in which body satisfaction and self-esteem are related. For while moderate to strong correlations generally have been found between these two variables, the precise way in which they are correlated, is largely still unknown.

## Hypotheses

In an attempt to further the existing research in this field, the present study focused on the specific body image issue of thinness vs. fatness or body shape, and also examined socioeconomic status and reported range of activities. The following related hypotheses were tested:

1. In keeping with past research, males were expected to be more satisfied than females with their body shape, no matter what their socio-economic status may have been.
2. Satisfaction with body shape and self-esteem was predicted to be significantly and more strongly correlated in females than in males. This was predicted, because the greater emphasis that women were expected to place on their body shapes, should have been reflected in measures of overall self-esteem.
3. The correlation between satisfaction with body shape and self-esteem would be lower for women who were from lower socio-economic groups. This finding was predicted, since several research projects found that upper-class women were more preoccupied with thinness.
4. Females, and to a lesser extent males, who participated in a broad range of activities, were expected to have lower correlations between body image and self-esteem. Individuals who participated in many activities should have been able to gain positive feeling of self-worth in a number of ways, and thereby have avoided relying so exclusively upon their physical appearance for feelings of self-worth.
5. For both males and females, high reported range of activity scores were expected to correlate significantly with positive body image and high self-esteem scores.

THE METHOD
Subjects:
Undergraduate subjects were recruited, primarily from the Psychology 101 subject pool at Loyola University of Chicago. Volunteer subjects were also sought from upper level psychology courses. There were 41 male and 43 female subjects who participated.

## Instruments:

Six questionnaires were used in the study. The first two of these were standard measures of selfesteem, namely form $C$ of the Coopersmith Self-Esteem Inventory, and the Rosenberg Self-Esteem Scale. Both of these questionnaires are widely used and studied research measures of self-esteem. Of the various Coopersmith forms, Peterson and Austin (1985) have written that "all versions are reliable and stable, and there exists an impressive amount of information bearing on their construct validity" (p.396). Sewell (1985) has stated that for the studies done on this measure to date, the internal consistency scores by KuderRichardson reliability estimates, range from . 87 to .92. The Rosenberg scale appears to be highly reliable as well, with various researchers obtaining reliability coefficients of from . 85 to . 92 (WYlie, 1974). In

Reviewing the validity studies on the Rosenberg, Wells and Markwell (1976) concluded that "it converges with other self-esteem measures and its criterion-relational performance has been highly favorable" (p.194). The Coopersmith and the Rosenberg, therefore, appeared to be among the best research measures of self-esteem available to this study.

After filling out these two questionnaires, the next form was a slightly revised edition of the Leisure Activities Blank by George McKechnie. This test is an exhaustive survey of participation in 120 different activities. It appears to be a highly reliable measure, with a pilot group of undergraduate subjects obtaining a z-transformed mean reliability coefficient of .85 (McKechnie, 1975).

Subjects were also asked to fill out two seperate body image questionnaires, measuring overall body image and satisfaction with body shape (thinness vs. fatness as presented by figure drawings). The first of these questionnaires was a Likert-type scale, based heavily on items from The Offer Self-Image Questionnaire for Adolescents. The second measure was a body shape questionnaire, utilizing human figure drawings comperable to those of Fallon and Rosin (1985). The work of Fallon and Rosin thus provided comparative data
for undergraduate subjects. Satisfaction with weight and figure scores were then obtained, by determining each subject's actual weight - ideal weight, and current figure - ideal figure. High difference in figure or difference in weight scores, thus reflected greater dissatisfaction with an individual's current body size.

Finally, subjects were also asked to complete a short questionnaire on demographic matters, which also included several questions about body image. The demographics questionnaire obtained information, that allowed the parents of each subject to be scores for socio-economic status with the widely used Hollingshead Index of socio-economic status.

Procedure:
Once subjects were recruited for the study, they were told to meet the experimenter at a particular classroom in Damen Hall. Groups of from 5 to 20 subjects participated in the study at the same time.

When a small group of subjects have assembled with the experimenter, they were given an informed consent form, which they considered and signed if they wished. The experiment's procedure then consisted entirely of asking subjects to fill out the six questionnaires discussed above. Subjects filled out each of the
questionnaires once, except for the Leisure Activities Blank, which subjects were be asked to fill out three times. The first time, subjects were asked to fill out this form to describe to the best of their recollection, the activities that they participated in during junior high school. The second time, subjects were asked to describe activities that they participated in during high school. Finally, on the third time, subjects were asked to describe which activities they currently engaged in.

Subjects were told to work through all of the various measures at their own pace. Subjects were also be asked to try to respond to every item on the questionnaires. Subjects did not put their names, or any other specific identifying data on the questionnaires. Instead, a small number appeared on the questionnaires of each subject, and they were identified by these numbers.

When subjects had completed all of the questionnaires, Psychology 101 students were assigned experimental credit toward the fulfillment of a course requirement. The experimenter then attempted to answer any questions that subjects had about the experiment. All of the subjects were thanked for their participation.

After the data was collected, appropriate statistical analyses were performed. Pearson correlation coefficients were computed seperately for males and females, for all of the major variables. The strength of the many of the coefficients for males were then compared to those of females. Analysis of variance procedures were used to address possible differences between males and females. Other appropriate procedures were also performed.

## RESULTS

Hypothesis \#1:
The first hypothesis predicted that males would be more satisfied than females with their body image, no matter what their socioeconomic status was. A two-way analysis of variance was undertaken to test this premise, with sex and socioeconomic status as the predictors of satisfaction with body shape and weight. Significant differences were obtained for satisfaction with body shape by sex, which are reported in Table 1-1. The interactions between sex and socioeconomic status were not significant.

Although not hypothesized, it was interesting to note that significant differences were also obtained for satisfaction with body shape by socioeconomic status, which are reported in Table 1-2. An SES score was obtained for each subject, by averaging their parents' scores on the Hollingshead Index of socioeconomic status. No significant differeces emerged on the body image scale, either for sex of socioeconomic status.

Table 1-1

## Satisfaction with Body Shape by Sex

a. actual weight - ideal weight:

|  | mean in pounds | $\underline{s d}$ | $\underline{F}$ | p. |
| :--- | :---: | :---: | :---: | :---: |
| males | -11.07 | 23.34 |  |  |
| females | 8.71 | 9.23 | 24.71 | $<.001$ |
| b. current figure - ideal figure: |  |  |  |  |
|  | mean score | sd | $\underline{F}$ | p |
| males | -.20 | 1.27 |  | 17.66 |
| females | .88 | 1.03 |  |  |

Table 1-2
Satisfaction with Body Shape by SES
a. actual weight - ideal weight:
mean in pounds $\quad \underline{\text { sd }}$ p.

| high SES | -10.35 | 25.00 |  |  |
| :--- | ---: | ---: | ---: | :--- |
| $(n=26)$ | 1.84 | 18.26 | 4.03 | $<.05 *$ |
| middle SES <br> $(n=26)$ | 4.30 | 14.27 |  |  |
| low SES <br> $(n=32)$ |  |  |  |  |

*A Scheffe procedure found the high and low SES groups significantly different at the . 05 level.
b. current figure - ideal figure:
mean score
sd
1.42
high $S$
$(n=26)$
middle SES .61 ( $\mathrm{n}=26$ )
low SES
.65
1.33
3.96
$<.05 *$
( $\mathrm{n}=32$ )
$\underline{F}$
p.
*A Scheffe procedure found the high and low SES groups significantly different at the . 05 level.

Hypothesis \#2:
The second hypothesis predicted that body shape would be more important for women in relation to selfesteem than it would be for men. This relationship was examined using Pearson correlation coefficients by sex. Fisher's $\underline{r}$ to $\underline{z}$ transformations were used to compare correlation coefficients.

The difference in figure scores (current figure vs. ideal figure) produced the significant results of Table 2-1. As was hypothesized, high self-esteem scores generally correlated with figure satisfaction for females, but not for males. Positive scores from the body image questionnaire, on the other hand, tend to be correlated significantly with high self-esteem for both males and females. These correlations for the body image questionnaire are also reported in Table 2-1.

The difference in weight scores (real weightideal weight), however, did not produce significant correlations with self-esteem for either males or females (with the Rosenberg Scale $\underline{r}=-.10$ for females, -. 2 for males, with the Coopersmith Inventory $\underline{r=-.10}$ for females, . 04 for males).

# Table 2-1 <br> Pearson Correlation Coefficients for Self-Esteem with Difference in Figure and Body Image Scores <br> Males $(n=41) \quad$ Females $(n=43)$ 

| Rosenberg @ |  |  |  |
| :---: | :---: | :---: | :---: |
| Scale with | . 02 | -. 43 |  |
| Difference |  |  |  |
| in Figure |  |  |  |
| Coopersmith | @ |  |  |
| Inventory with | -. 06 | -. 37 | ** |
| Difference |  |  |  |
| in Figure |  |  |  |
| Rosenberg |  |  |  |
| Scale with | . 64 *** | . 68 | *** |
| Body Image |  |  |  |
| Scale |  |  |  |
| Coopersmith |  |  |  |
| Inventory with | . 60 *** | . 73 | *** |
| Body Image |  |  |  |
| Scale |  |  |  |
| ** p. < . 01 |  |  |  |
| *** p. < . 001 |  |  |  |
| @ These correlation coefficients are significantly |  |  |  |
| different at p . | < .05. |  |  |

Hypothesis \#3:
The third hypothesis predicted that correlations between satisfaction with body shape and self-esteem would be lower for women who were from lower socioeconomic status groups. To test this premise, female subjects were placed in two groups according to their family's score on the Hollingshead Index of socioeconomic status. Two groups were used in order to maintain sufficient sample size. Pearson correlation coefficients were then determined for both the high and low SES females, for both difference in figure scores (current figure - ideal figure) and overall body image scores with self-esteem scores. For the correlations of body image and difference in figure scores with the Coopersmith Inventory, the differences between the high and low SES groups were unusually significant in the predicted direction, given the small sample size. The correlations of the Rosenberg Scale with the difference in figure scores were also significant. All of these correlations appear in Table 3-1. The correlation coefficients for self-esteem measures with difference in weight scores (current weight - ideal weight) were not statistically significant, but did appear to represent a trend in the predicted direction. These correlations also appear in Table 3-1.

Table 3-1

```
Pearson Correlation Coefficients for Females Grouped
    by SES for Self-Esteem Scores with Difference
    in Figure and Weight scores
                    SES
            High (n=19) Low (n=22)
Rosenberg
Scale with
. 77 *** . }58 *
Body Image
Score
Coopersmith @@@
Inventory with . 88 *** . 36 *
Body Image
Score
Rosenberg @
Scale with -.67 *** -. 21
Difference
in Figure
Coopersmith @@@
Inventory with -.71 *** . 15
Difference
in Figure
Rosenberg
Scale with -.30 -.01
Difference
in Weight
Coopersmith
Inventory with -. 32 .04
Difference
in Weight
* p. < . 05 
** D. < .01
*** p. < . 001
@ These correlation coefficients are significantly
different at p. < .05.
@@@ These correlation coefficients are significantly
different at p. < .001.
```

The relationship between satisfaction with body shape and self-esteem for women was also tested with partial correlation procedures. None of the results of the partial correlation procedures, however, differed significantly from the pearson correlation coefficients. The use of SES as the covariate did not make a significant difference.

Hypothesis \#4:
The fourth hypothesis predicted that females, and to a lesser extent males, who reported participating in a broad range of activities, were expected to have lower correlations between body image and self-esteem. To test this prediction, both male and female subjects were grouped according to their total scores on the Leisure Interests Inventory. Pearson correlation coefficients were then determined for high and low range of activity groups, between body image scores and self-esteem scores. While the differences were not statistically significant, males in the low activity groups had higher correlations between body image and self-esteem than did males in the high activity groups. For females, the differences between the high and low activity groups were inconsistent. The correlation coefficients for both males and females are reported in Table 4-1.

Table 4-1
Pearson Correlation Coefficients By Sex, Grouped by
Reported Range of Activities for Self-Esteem
with Body Image Scores

MALES
Reported Range of Activites

| Junior |  | High | Senior High | Current |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High | Low | High | Low | High |  |
| $(n=21)$ | $(n=20)$ | $(n=21)$ | $(n=20)$ | $(n=22)$ |  |$\quad(n=19)$

```
Body
Image . 64*** . 67*** . 56 ** . 67*** . 53 ** . 70 ***
with
Rosenberg
Scale
Body
Image . 55 ** . 66*** . 50 ** . 68*** . 47 ** . 69***
with
Coopersmith
Inventory
```

FEMALES

| Junior |  | High | Senior High | Current |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High | Low | High | Low | High |  |
| $(n=22)$ | $(n=21)$ | $(n=22)$ | $(n=21)$ | $(n=22)$ |  |$(n=21)$

```
Body
Image . 75*** . 48** . 75*** . 48 ** . 60*** . 63***
with
Rosenberg
Scale
```


## Body

```
Image . 77*** . 64*** . 58 ** .74*** .75*** .65*** with Coopersmith Inventory
```

```
** p. < . 01
*** p. < . 001
```

In a further effort to understand the possible influence of reported range of activities upon the correlation between body image variables and self-esteem, Pearson correlations coefficients were also obtained for difference in weight and difference in figure scores with self-esteem, for each of the range of activity groups. When these correlations were compared with Fisher's $\underline{r}$ to $\underline{z}$ transformations, however, significant differences generally did not emerge between the high and low reported range of activity groups. The only exception was the correlations for difference in figure scores with self-esteem, for males grouped by current range of activites. These results appear in Table 4-2, and indicate that males with a greater range of current activities tended to experience greater discrepancies between their ideal and real figure and self-esteem scores.

Hypothesis \#5:
The fifth hypothesis predicted that for both males and females, high reported range of activity scores would correlate significantly, with positive body image and high self-esteem. To test this Pearson correlation coefficients were obtained by sex, for activity scores

Table 4-2

## Pearson Correlation Coefficients for Males Grouped

## by Reported Range of Current Activities for

Self-Esteem Measures with Difference in

## Figure Scores

Reported Range of Activities
High ( $\mathrm{n}=21$ )
Low ( $\mathrm{n}=20$ )

Rosenberg
Scale with -. 27 . 18
Difference
in Figure
Coopersmith @
Inventory with -. 39 * . 19
Difference
in Figure

* p. < . 05
@ These correlation coefficients are significantly different at p. < .05.
with body measures of self-esteem and with body image scores. Because of the study's interest in satisfaction with body shape, correlation coefficients were also obtained for range of activities with difference in figure scores, and with difference in weight scores. Correlations with these various body image variables and self-esteem were obtained for range of activities in junior high, senior high, and at the present. For females, these correlations were highly significant for the self-esteem and body image scores, and are indicated in Table 5-1.

For the difference in figure and difference in weight scores of females, however, the only significant correlation was between difference in figure and reported range of activities in senior high ( $\underline{x}=-.26$, p. < . 05).

For males, only the correlation between range of activities in junior high and the Coopersmith Inventory proved to be significant $(\underline{r}=.27, \underline{p} .<.05)$. None of the other correlation coefficients obtained for males, between range of activities and either self-esteem or the various body image variables were significant at even the . 05 level.

## Table 5-1

## Pearson Correlation Coefficients for Females $(n=43)$ <br> for Self-Esteem and Body Image with <br> Range of Activities

Reported range of activities Junior High Senior High Present
 Score

| $*$ | p. | $<.05$ |
| :--- | :--- | :--- | :--- |
| $* *$ | p. | $<.01$ |
| $* * *$ | p. | $<.001$ |

Other Noteworth Results:
A number of other findings emerged from the data, which did not relate to the initial hypotheses, but were nevertheless statistically significant. These findigns related primarily to the variables of religiosity and socioeconomic status. Religiosity was assessed by asking subjects to indicate on the demographics questionnaire how religious they were, on a seven point Likert scale.

The difference in the degree of religiosity expressed between males and females was not significant. For females, however, religiosity was significantly correlated with both real and ideal weight, so that heavier females tended to describe themselves as more religious (for real weight $\underline{r}=.38, \mathrm{p} .<.01$, for ideal weight $\underline{r}=.45, \mathrm{p} .<.001)$. Females who selected heavier figure drawings as representing their current figures, also tended to describe themselves as more religious ( $\underline{r}=.29$, $\mathrm{p} .<.05$ ).

For males, on the other hand, religiosity did not correlate significantly with weight or body image. Religiosity was significantly correlated, however, with the family's socioeconomic status for males, with higher socioeconomic status males describing themselves as more religious ( $\underline{r}=.42, \underline{p} .<.01$ ). For females,
socioeconomic status did not appear to be related to religiosity, but was significantly correlated with selfesteem. Females, who were from families of lower socioeconomic status, tended to score higher on the Rosenberg Scale ( $\underline{r}=.36$, p. $<.05$ ).

Finally, academic status at the university, appeared for females to be related to body shape satisfaction. Females, with more advanced academic status (juniors and seniors vs. freshmen), had lower difference in figure and difference in weight scores (for difference in figure $\underline{r}=-.34$, p. $<.05$, for difference in weight $\underline{r}=-.41$, p. < .01).

## DISCUSSION

This project attempted to study a number of different aspects of self-esteem and body image, and found significant results in several areas. In order to discuss these results in a meaningful fashion, data about how satisfied people are with their body shape (thinness vs. fatness) and overall body image will be reviewed first. The ways in which body shape satisfaction and body image relate to self-esteem will then be discussed. Finally the influence of range of activities upon body image and self-esteem will also be examined.

Satisfaction with Body Shape and Body Image:
As the study attempted to determine how people feel about the shape of their bodies, significant differences emerged for both sex and socio-economic status. Perhaps the most surprising finding was that males produced a greater difference in weight score (actual weight - ideal weight), than did females. This seems to indicate that due to their desire to be heavier, undergraduate males are actually more disatisfied with their weight than are undergraduate females, who wish to be thinner. This of course goes
against the widely held notion, that college age females are more preoccupied and concerned with their weight. It may be the case then, that previous researchers have simply focused on the desire of females to weigh less. Dieting and other drastic measures to lose weight may have made females the center of attention, while males are actually more dissatisfied with their body weight. It is interesting to speculate, about whether or not this desire that college age males have to weigh more, could lead to obesity later in life. These males may develop eating habits in order to gain weight, which eventually make it difficult for them to avoid being overweight. Males who presently indicate that they want to gain weight, may someday achieve an undesirable result.

Curiously enough, the males who indicate that they want to weigh more, do not necessarily want to look heavier. The greater dissatisfaction that males experience with their weight, did not translate into a greater dissatisfaction with their body shape. Females reported a significantly larger difference in figure score (current figure - ideal figure) than did males. This finding seems to be in keeping with the predictions of the first hypothesis, which suggested that males would be more satisfied than females with their body
shape. This finding also seems to concur with the work of previous researchers, such as Tucker (1982) and Fallon and Rosin (1985). The present study thus does two things. It supports past research which has suggested that young women are less satisfied with their figure shapes than young men, and also indicates that males are less satisfied with their weight.

It may be the case then, that while females were wanting to both look thinner and weigh less, the men simply wanted to be firmer and more muscular. This would explain why the males who wanted to weigh more, did not indicate a strong desire for a larger body shape.

Along with these sex differences, surprising differences also emerged with weight and shape satisfaction for socioeconomic status. When the subjects were grouped into three SES groups, significant differences were found between the high and low SES groups for both satisfaction with weight and satisfaction with figure shape. In both cases, the high SES subjects wanted to be heavier, while the low SES subjects wanted to be thinner and weigh less. This is quite in contrast to the findings of previous authors, such as Garner, Garfinkel and Olmstead (1983), who have indicated that upper class subjects generally want to be
thinner. But Garner, Garfinkel, and Olmstead themselves point out, that past research has been done largely on white individuals, from either Protestant or Jewish families. The present study thus indicates that high SES individuals from all ethnic or religious backgrounds may not share the desire to be thinner and weigh less. The primarily Roman catholic subjects in the present study, may have had different feelings about weight and body shape. Religious beliefs did seem to be a factor, since females who described themselves as more religious, had significantly heavier real and ideal weights. It is also possible that the ethnic background of the subjects in this study, played a role in the relationship that emerged between body shape satisfaction and SES. The Roman Catholic subjects in this study, may have been more of eastern European or Mediterranean descent, than the primarily Anglo-Saxon subjects of past research.

In any case, satisfaction with weight and body shape seem to be the crucial variables, for distinguishing both males from females, and high from low socioeconomic groups. No significant differences emerged on the overall body image scale, for either sex or socioeconomic status. This scale may have been too global an assessment of how subject's viewed their
bodies, to pick up on some of the subtle differences that exist between groups, such as the relative importance of facial features, skin condition, etc.

## Body Image and Self-Esteem:

Since significant differences emerged between groups for various aspects of body shape satisfaction, it seems logical to see how these factors relate to self-esteem for the various groups. With this task, however, the global nature of the overall body image scores may well have been more of a strength than a weakness. The overall body image scores correlated with the self-esteem measures at a highly significant level, for both males and females. This seems to indicate two things. First, the overall body image scale was able to tap into some aspect of body image for both males and females, which was strongly related to self-esteem. Second, the level of this relationship did not vary significantly by sex. These results also corresponded well with the work of other researchers, who have found similar, significant correlations between body image and self-esteem for college age males and females (Lerner, Karabenick, \& Stuart, 1973; McLean, 1976; Padin, Lerner, \& Spiro, 1981).
producing this relationship, may vary by sex. Satisfaction with body shape was significantly more related to self-esteem in females, than in males. Women who reported a greater desire for a thinner figure had lower self-esteem scores, while for males there was apparently no relationship between these variables. This supports the prediction of the second hypothesis, that for women there would be a stronger relationship between body image and self-esteem. It is also in keeping with the ideas of authors such as Faust (1982), who have written about how the desire for a very thin, pre-pubertal look can affect the self-esteem of women. The desire for this type of look, however, does not affect all women in the same way. Female subjects, from families of high socioeconomic status, showed significantly stronger correlations between their difference in figure scores and self-esteem scores, than did female subjects from low socioeconomic status families. For the high SES females, high difference in figure scores (reflecting greater dissatisfaction with body shape) were related in a stronger manner to low self-esteem. For these high SES females, high overall body image scores were also related more significantly to a high score on the coopersmith Inventory of SelfEsteem. These results support the third hypothesis of
the study, that correlations between satisfaction with body shape and self-esteem would be lower for women who were from lower socioeconomic status families. It seems possible that the high SES women in this study depended a great deal upon satisfaction with body shape and body image, for deriving positive feelings of self-worth. These women may desire thin bodies which are difficult for them to maintain. Then as a result of negative feelings about the shape of their figures, these upperclass women may unfortunately suffer from low selfesteem. This could be one possible explanation for why the women in this study, who were from families of lower socioeconomic status, scored significantly higher on the Rosenberg Scale of Self-Esteem. Perhaps these lower SES women, engaged in a wider array of self-esteem enhancing activities, and were thus less dependent on their appearance for feeling positively about themselves.

In any case, the relationship between body shape or thinness vs. fatness and self-esteem seems to be powerful for women. It is therefore interesting to note that there is apparently little relationship between self-esteem and satisfaction with weight. The difference in weight scores did not correspond significantly with self-esteem scores for either males or females. It seems that even the large difference in
weight scores reported by males were not related to self-esteem. Difference in figure scores appeared as the aspect of body image, at least for females, which had a strong relationship with self-esteem. It is possible that the figure drawings, used to assess difference in figure scores, pulled for a more meaningful and affect-laiden response from females, than merely asking women their real and ideal weights. In any case, this can be identified as a powerful aspect of body image for females. For males, it remains unclear, what particular aspects of their overall body image scores were correlating with self-esteem. Feelings that males have about the size of various body parts or about facial features may well have been factors.

## The Role of Activities:

While investigating the relationship between particular aspects of body image and self-esteem, the present study also sought to examine how an individual's reported range of activities might influence these variables. In the fourth hypothesis, it was predicted that females and to a less extent males, who participated in a broad range of activities, would have
lower correlations between body image and self-esteem. It was thought that individuals, who participated in a wide range of activities, would have many opportunities for developing feelings of mastery and self-worth. They would then be less dependent on satisfaction with their body image, for deriving a positive sense of selfesteem.

To test this idea, subjects were asked to describe their range of activities in junior high, senior high, and at the present. It was found that for each of these three time periods, an individual's reported range of activites did not appear to influence the strength of the relationship between body image and self-esteem scores. This was contrary to the prediction of the fourth hypothesis. It was also found that reported range of activities did not seem to influence the strength of the relationships between difference in weight scores and self-esteem, or difference in figure scores and self-esteem. The only exception was the relationship between difference in figure scores and self-esteem, for males who were grouped by current range of activities. Here males with a high range of activities showed a significantly stronger and more negative relationship between body shape satisfaction and self-esteem (high difference in figure scores was
related to low self-esteem), than males with a low range of activities.

For males then, there may be some significance to the way in which reported range of activities effects the relationship between figure shape and self-esteem. Men who participate in a broad range of activities, may actually become more, instead of less self-conscious about their body shapes. If their recollections of junior high and senior high activiteris were accurate, however, this was not the case for these males when they were younger. Some type of shift appears to have occured over time, during which men with a high range of activities during the college years, develop concerns about their appearance.

Grouping women by range of activities did not seem to affect the relationship between self-esteem and body image. The cultural norms around physical appearance may be so strong for women, that body image is related to self-esteem regardless of how many activities a woman participates in. The study thus seems to indicate that in general, the self-esteem of women is related to both their body image and their range of activities.

For in testing the fifth hypothesis, it became apparent that the self-esteem of females was related to their reported range of activities, even though range of
activities did not appear to influence the strength of the relationship between body image and self-esteem. High range of activity scores in junior high, senior high, and at the present time, were significantly related to positive self-esteem scores and high body image scores for females. So while a woman's range of activities does not appear to influence the relationship between body image and self-esteem, her range of activities is directly related to these other variables. Range of activities appears important then, in influencing the development of positive self-esteem and body image among college age females.

For males, this does not seem to be the case. The reported range of activities of male subjects did not appear to relate in a significant manner to either their self-esteem or body image. It thus remains somewhat unclear, how college age males derive feelings of self worth. They may obtain their feelings of self-worth more exclusively from their overall body image, than do females.

Summary of Discussion:
In conclusion, overall body image seems to be related positively to self-esteem for both males and females. This is in keeping with past research (Lerner, Karabenick, \& Stuart, 1973; McLean, 1976; Padin, Lerner, \& Spiro, 1981). Males and females have different ideas, however, about what constitutes an ideal physique. Males generally wanted to be heavier, while the females wanted to be thinner. Curiously, the reported difference in weight (real weight - ideal weight) was actually greater for males.

Difference in weight were not related significantly to the self-esteem of either males or females. Difference in figure scores, on the other hand, were related significantly to the self-esteem scores of females. This was particularly true for women from high SES families. These women had a significantly stronger relationship between figure shape satisfaction and self-esteem, than did women from families of lower SES status. High reported range of activities scores were also related significantly to both positive selfesteem and high body image scores for females.

This study raises a number of possible questions for further research. Several of them are stated and discussed below:

1. The desire of male subjects to be heavier was unexpected. It also appears to be a little researched aspect of body image. Why college age males wish to weigh so much more, and how this desire affects them, are possible questions for further exploration.
2. The data of this study indicate that overall body image and self-esteem are significantly related for males. Yet what specific aspects of body image relate to self-esteem in males remains largely unclear, since satisfaction with weight and figure shape do not seem to be factors. Does a man's perception of his strength affect his self-esteem? Does the size of various body parts affect his self-esteem? These are questions which appear to warrant further study, given the significant relationship that emerged between body image and selfesteem for males.
3. The subjects in this study who were from high sES families reported a desire to be heavier, while those
who were from lower SES backgrounds waned to be thinner. This appears to contradict the conclusions of past researchers (Garner, Garfinkel, \& Olmstead, 1983). What was the cause of this discrepancy? Were religion or religiosity factors along with socioeconomic status? Was ethnic background a factor? Future research could look at socioeconomic status among various ethnic and religious groups, to understand how the interplay of these variables may affect body image.
4. Since reported range of activities does not seem to relate in a significant manner with self-esteem or body image for males, other aspects of participation in activities should perhaps be explored. How does participation in particular activities, or extent and depth of participation affect the self-esteem of males? These topics could also be explored with females, to gain a further understanding of how activities may relate to their feeligns about themselves and their bodies.
5. This study was done with young adults, and found significant relationships between various aspects of body image, self-esteem, and range of activities. But little is known about how these factors affect adults
across the lifespan. Studies with middle-aged or elderly subjects could thus potentially add a tremendous amount of knowledge to the findings of this project.

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## APPROVAL SHEET

The thesis submitted by Steven $C$. Abel has been read and approved by the following committee:

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The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.


