Body image disturbance in relation to attributions of physical attractiveness and social competence in college women.

Christine Louise. O'Connor

University of Windsor

Follow this and additional works at: https://scholar.uwindsor.ca/etd

Recommended Citation

https://scholar.uwindsor.ca/etd/1317

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.
NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.
BODY IMAGE DISTURBANCE IN RELATION TO ATTRIBUTIONS OF PHYSICAL
ATTRACTIVENESS AND SOCIAL COMPETENCE IN COLLEGE WOMEN

by

Christine O'Connor

B.Sc.(Hons.), McGill University, 1991

A Thesis
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the
Requirements for the Degree
of Master of Arts at the
University of Windsor
Windsor, Ontario, Canada
1995
The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.
ABSTRACT

The present study examined the relationship between eating-related attitudes and behaviors and the body figures chosen to represent each participant's current body size, her ideal one, the one she judges to be most physically attractive to men, and the one she believes is most socially competent. One hundred and thirty-eight undergraduate women responded to the Figure Rating scale, the Eating Attitudes Test, and an open-ended question asking them to explain their choice of ideal body figure. Abnormal eating-related attitudes and behaviors were detected in 11.6% of the sample. Perceived current body size and the difference between current and ideal sizes emerged as the best predictors of eating-related attitudes and behaviors. As eating and weight concerns became more pathological, the discrepancy between ideal body size and that judged to be physically attractive increased. The discrepancy between the socially competent body figure and the ideal one remained unchanged. The three most common reasons given to account for the choice of ideal body figure were to obtain a healthy body, to increase self-confidence, and to be able to comfortably wear fashionable clothing. Future research should examine the social competence construct in more detail to further elucidate its relationship to eating-related attitudes and behaviors. The role of health, self-confidence, and fashion in the choice of ideal body figure should also be examined.
ACKNOWLEDGEMENTS

I wish to thank all the people who, in various ways, helped to make this research possible. First of all, I would like to extend my appreciation to the chair of my committee, Dr. W. Balance, whose knowledge and support were invaluable. I would also like to thank my committee members, Dr. M. Kral and Dr. S. Selby, for their helpful comments and suggestions.

I am grateful to my friends, particularly Elizabeth Hall, for their patience and encouragement. Many thanks are also extended to my parents for their support throughout this project.

I am grateful to all the women who participated in this study for taking the time to share their feelings and ideas about a very personal subject.

Finally, I would like to thank the Fonds pour la Formation de Chercheurs et l'Aide à la Recherche for financial aid granted to me to pursue this research.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td></td>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td></td>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>I</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Body Image Disturbance in Eating-Disordered Populations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Body Image Disturbance in College Populations</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Body Image in Relation to Physical Attractiveness</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Body Image in Relation to Social Competence</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Purpose of the Present Study</td>
<td>22</td>
</tr>
<tr>
<td>II</td>
<td>METHOD</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Participants</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Measures</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>The Figure Rating Scale</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>The Eating Attitudes Test</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Procedure</td>
<td>28</td>
</tr>
<tr>
<td>III</td>
<td>RESULTS</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>First Multiple Regression Analysis</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Second Multiple Regression Analysis</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Pattern of Relationships between FR Scores as EAT Score Increases</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Qualitative Data</td>
<td>39</td>
</tr>
</tbody>
</table>
IV DISCUSSION

Abnormal Eating Attitudes in Relation to Social Competence 41

Significance and Implications of Preliminary Qualitative Data 45

Limitations of Present Study and Directions for Future Research 47

Appendix

A ORAL RECRUITMENT INFORMATION 49

B CONSENT FORM 51

C DEMOGRAPHIC QUESTIONNAIRE 53

REFERENCES 55

VITA AUCTORIS 67
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Means and Standard Deviations of Variables Used in MR Equation 1</td>
<td>31</td>
</tr>
<tr>
<td>2</td>
<td>Product-Moment Correlations between Variables in MR Equation 1</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>Squared Semi-Partial Correlations and F Values of the 4 FR Scores</td>
<td>34</td>
</tr>
<tr>
<td>4</td>
<td>Means and Standard Deviations of Variables Used in MR Equation 2</td>
<td>35</td>
</tr>
<tr>
<td>5</td>
<td>Product-Moment Correlations between Variables in MR Equation 2</td>
<td>36</td>
</tr>
<tr>
<td>6</td>
<td>Squared Semi-Partial Correlations and F Values of the 6 FR Scores</td>
<td>38</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

The current widespread interest in body image in diverse branches of psychology is a product of early research in neurology that focused on the body experiences of patients with brain damage. The distortions in body perceptions often found in these patients was hypothesized to have resulted from brain damage. Such studies highlighted the fact that normal body perception is not immutable, but instead may become distorted and pathological in certain cases. These early studies focused on various brain structures that were thought to have been responsible for the production of normal body perception and whose destruction resulted in distorted body perceptions. By implication, psychological factors were seen as playing no part in these distortions (Cash & Pruzinsky, 1990).

Paul Schilder (1950) raised the body image concept to new heights through his insistence that body image disturbances needed to be examined with respect to a more psychological framework. He defined the concept of body image in the following terms, "The image of the human body means the picture of our own body which we form in our mind, that is to say, the way in which the body appears to ourselves" (p. 11). It has been suggested that Schilder's most unique contribution to the field of body image research was the notion that body image is important not only as it relates to pathological influences in body perception, but also as it pertains to the everyday body awareness of the
average person (Cash & Pruzinsky, 1990).

Other important influences to the field of body image research stemmed from the work of various psychoanalytic theorists. Body sensations and fantasy have always assumed a vital role in their theories, so the concept of a psychologically derived body image was not antithetical to the larger psychoanalytic framework. Adler, in theorizing about inferiority (cited in Fisher & Cleveland, 1968), hypothesized that the psychological impact of weak or defective body parts may manifest itself in body image problems that the person must then attempt to compensate for in some respect.

In time, the body image construct evolved to include two interrelated aspects: the perceptual aspect relating to the mental image one has about one's body, and the emotional aspect pertaining to the feelings about one's body that accompany this mental image (Glucksman, 1972; Kolb, 1959). Later theorists expanded on the emotional component of body image, describing it as a complex response involving feelings of physical effectiveness and attractiveness, and of self-esteem (Lerner & Karabenick, 1974).

Social constructionist theorists further expanded the concept of body image by bringing it into the sociocultural realm. They insisted that body image development and satisfaction are crucially linked to the prevailing era and culture of which they are a product. The ideal body, against which one's body image is compared, also changes with respect to
cultural influences. Our current model of the beautiful body, as it relates to women, is one that has prevailed since the 1960's and is based on a virtually unattainably thin ideal (Cash & Pruzinsky, 1990).

**Body Image Disturbance in Eating-Disordered Populations**

Interest in the area of non-neurologically caused body image disturbance can be traced to the landmark study of Slade and Russell (1973), which revealed that anorexics possess greater body size overestimation than normal controls. The authors engineered a revolutionary technique to aid in the measurement of physical size estimation. Their Movable Caliper Technique (MCT) consisted of a horizontal bar and two lights that were mounted on a movable track. In this way, subjects could adjust the width between the two lights to match their estimations of the width of various physical objects, including body parts. The authors wished to see if the size perception problems of anorexics, expressed in terms of body size distortion, would also be displayed in other areas. They examined anorectic subjects' size estimations of non-body physical objects, other women's bodies, and non-weight aspects of their own bodies (e.g., height).

Findings revealed that anorexics consistently overestimated the width of their own bodies, whereas normal control subjects did not. Furthermore, the anorectic subjects, like the controls, were able to accurately estimate the widths of wooden blocks and their own heights. However, the anorectic subjects, unlike the controls, tended to exaggerate the width of other women's bodies,
though not to the same extent as their own. The authors concluded that perceptual size distortions existed only in relation to the estimation of body width, especially when such estimations pertained to the anorexics' own bodies.

In general, early clinical research focused on the perceptual aspect of body image disturbance (i.e., body image distortion), due to repeated findings, as above, of blatant body size distortions in eating-disordered populations (Bruch, 1962). Researchers soon expanded their studies to include obese and bulimic subjects as well. In addition to body size distortion, other disturbed body perceptions, such as the misperception of various body sensations, were frequently noted in these populations (Bruch, 1973).

Casper, Halmi, Goldberg, and Davis (1979) studied anorectic patients in an effort to establish a relation between body size overestimation and other clinical aspects of the disorder. They discovered that the anorexics with the largest degree of body size overestimation also exhibited the most malnourishment, failure to respond to treatment, and likelihood of vomiting as a weight control method.

Ben-Tovim, Whitehead, and Crisp (1979) reported that as the body size to be estimated narrowed (i.e., as either the subject herself or the model to be rated became thinner), the accuracy of the size estimations of body parts declined. This finding was not exclusive to anorexics, but was, in fact, generalizable to other eating-disordered populations as well.
While clinical researchers were busy studying the perceptual aspect of body image disturbance, social psychologists began to look at the emotional aspect of such a disturbance in the general population. They attempted to uncover the psychosocial conditions that influence body image satisfaction (Cash, Cash, & Butters, 1982; Cash, Winstead, & Janda, 1986; Hesse-Biber, Clayton-Matthews, & Downey, 1987).

More recently, both the perceptual and the emotional aspects of body image have been studied in both eating-disordered and normal populations (Cash & Brown, 1987; Keeton, Cash, & Brown, 1990; Slade, 1985; Thomas & Freeman, 1990). Various measurement techniques have been developed that focus on either or both aspects of body image (Cash & Pruzinsky, 1990).

Touyz, Beumont, Collins, McCabe, and Jupp (1984) examined both aspects of the disturbance in anorexics and normal controls. They found that the anorexics showed more body size overestimation than did the controls. However, both groups perceived their ideal body size as being about 20% smaller than their actual size. The authors point out the important fact that the anorexics were already about 23% lighter in weight than the controls, indicating that the ideal body size they chose was drastically thinner than that chosen by the controls.

Other studies in the area of body image disturbance have attempted to find correlates and potential risk factors for the development of an eating disorder and the disturbed body image that accompanies it. Katzman and Wolchick (1984) reported that
bulimics evidenced lower self-esteem, more depression, a stronger need for approval, and more negative body attitudes than did normals. Similar findings of lower self-esteem in other eating-disordered populations were reported by Beren and Chrisler (1990). Eating-disordered women also tend to consistently exhibit more externality in terms of locus of control measures, and more difficulty dealing with emotions (Johnson & Larson, 1982; Weiss & Ebert, 1983). Such findings imply that these women do not perceive themselves as masters of their own destiny and that their emotions may be experienced as strange or alien. Finally, Kendler, MacLean, Neale, and Kessler (1991) have noted that a very thin ideal body size and excessive dieting and exercising are risk factors for the development of bulimia. These factors relate to both the unrealistic standard of thinness and the driven nature of the behavior used to reach it.

Body Image Disturbance in College Populations

Much of the early research that examined body image disturbance in eating-disordered populations utilized so-called "normal" women as control groups. These control group women were usually the same age as the eating-disordered women, but were of normal weight and did not exhibit overt signs of an eating disorder (e.g., they did not binge and purge). However, evidence soon accumulated, indicating that although these women possessed body images that were less disturbed than those of their eating-disordered counterparts, they nonetheless exhibited a significant degree of both body image distortion and dissatisfaction (Cash &
Pruzinsky, 1990). Many subsequent studies that have utilized populations of college women have found that a large proportion of these women manifest levels of body-image disturbance that are comparable to those found in eating-disordered populations (Ben-Tovim et al., 1979; Crisp & Kalucy, 1974; Garner, Garfinkel, Stancer, & Moldofsky, 1976). Such a finding has been explained by noting that college women, typically 18 to 25 years old, tend to be at an age when weight and body shape are of particular importance to them. Examined in this light, it is not surprising that eating disorders and related aspects, such as body image disturbance, are so prevalent among these women (Hsu, 1989; Hesse-Biber, 1989).

Studies that examined the emotional aspect of body image disturbance have revealed alarming developmental patterns of body image dissatisfaction and an intense desire to lose weight. Two studies indicated that about 78% of normal weight 12 to 14 year old girls wanted to lose weight (Davies & Furnham, 1986; Eisele, Hertsgaard, & Light, 1986). Other findings that are consistently noted in the literature have reported that about 63% of adolescent girls are on weight-reduction diets, even though they are in the normal weight range (Rosen & Gross, 1987). It is not surprising that by the time these adolescents reach young adulthood, the age of typical college populations, dissatisfaction with their bodies and a desire to lose weight is deeply ingrained in them. Halmi, Falk, and Schwartz (1981) have indicated that the majority of college women see themselves as
being overweight. Furthermore, underweight college women typically do not consider themselves to be below a healthy, normal weight (Gray, 1977). Dykens and Gerrard (1986) studied 424 college women and found that 60% were repeat dieters, 14% were repeat dieters who also displayed bulimic tendencies, and only 26% were non-dieters. Both groups of dieters, a total of 74% of the female college sample, exhibited a similar high level of negative feelings about their bodies.

Other studies that have focused on the perceptual aspect of the disturbance have found similar alarming results. Birtchnell, Dolan, and Lacey (1987) examined a group of non-eating-disordered women of normal weight. These women typically overestimated their chests by 24%, their waists by 28%, and their hips by 16%. Those with a statistically ideal weight wanted to weigh 8 pounds less, while the entire group in general indicated that they would be happiest with bodies that were 10 pounds underweight. The authors stated that such results were comparable to their previous findings amongst a group of bulimic patients (Birtchnell, Lacey, & Harte, 1985).

Cash and Green (1986) compared groups of normal weight, underweight, and overweight college women. The overweight women displayed no significantly distorted body size, and accurately believed that they were larger than their normal and underweight counterparts. The underweight women, however, overestimated their body size, and did not believe that they were thinner than their normal weight counterparts. Body image dissatisfaction was
comparable for the normal and underweight groups, but the 
overweight women were even more critical and dissatisfied with 
their bodies than these two groups. Other studies, having 
utilized distorting mirror and videocamera techniques, have 
consistently indicated that women tend to overestimate their 
current body size and underestimate their ideal body size 
(Brodie, Slade, & Rose, 1989).

In an effort to uncover factors that may contribute to a 
disturbed body image, Myers and Biocca (1992) found that watching 
even 30 minutes of television a day can have an effect on women's 
perceptions of their bodies. The authors state that the very 
thin feminine bodies promoted by television become incorporated 
by most women as their ideal body image. In most cases, this 
ideal body is in conflict with their actual body size, ultimately 
leading to an unstable self-perceived body image. In a related 
finding, Irving (1990) showed slides of thin, average weight, and 
oversize models to women who possessed various levels of self-
reported bulimic symptoms. He found that exposure to thin models 
was related to lower self-esteem ratings in his female subjects, 
regardless of the degree of disordered eating symptoms that were 
present. Furthermore, those women with the most disturbed eating 
patterns reported the greatest amount of pressure to be thin. 
This pressure was viewed by them as emanating from the media, 
their peers, and their families.

In perhaps the most disturbing finding of all, Hesse-Biber 
et al. (1987) reported that about 28% of college women were
anxious when they viewed themselves in a mirror. Another 7% were actually repulsed or depressed when viewing their reflections. In contrast, only 6% of college men were anxious upon viewing their reflection, while 3% were depressed and none were repulsed. Finally, the women who desired the most weight loss also possessed the most distorted body images.

Other studies of body image among college populations that have included men as well as women have also found very different patterns between the two groups. Franzoi and Shields (1984) have found that the body esteem of men is related to general physical attractiveness, upper body strength, and overall physical condition. Women, on the other hand, derived their sense of body esteem from their perception of their sexual attractiveness, weight, and overall physical condition. Women were more likely to scrutinize their body part-by-part, while men possessed a more holistic body concept (i.e., their ratings of individual body parts were more highly correlated). Overall, women indicated a greater awareness of their bodies, and body image was much more crucial to their overall self-concept than was the case for men. Other researchers have noted that being overweight, in reality or imagination, is more detrimental to the well-being and happiness of women than of men (Cash & Hicks, 1990). Edgar (1973) had previously indicated that findings of this nature are not surprising in light of the greater pressure exerted on women to conform to societal ideals of thinness.

Mable, Balance, and Galgan (1986) have examined body
perception differences between men and women. Men exhibited body weights that were, on average, 3.6% above their projected height/weight midpoints (i.e., ideal weights), but saw themselves as only 1.6% above their ideal weight. Women, on the other hand, evidenced body weights that were, on average, 4.4% below their height/weight midpoints, but viewed themselves as 9.7% above their appropriate weight. In summary, there was a slight tendency for men to underestimate their body sizes, while women overestimated them. However, the men were almost equally dissatisfied with their body size, desiring a more muscular shape in general (i.e., they wanted to be bigger and the women wanted to be smaller). Other studies conducted by the same authors have consistently indicated that women overestimate their body size by about 15%, while men show little distortion in their body size perception (Galgan & Mable, 1986; Mable, 1985).

Mintz and Betz (1986) have reported results concerning body image dissatisfaction that differ from the above findings. They indicated that women were significantly less satisfied with their bodies than were men. With regard to distortion, women typically perceived themselves as being 10 pounds overweight, including the 25% of the sample that were actually underweight. Hesse-Biber et al. (1987) have stated that women possess a stronger desire for weight change than do men, presumably due to more body size dissatisfaction. Other studies have revealed similar findings (Berscheid, Walster, & Bohrnstedt, 1973).

Overall, women, as compared to men, are more likely to:
weigh themselves more often (Dwyer, Feldman, Seltzer, & Mayer, 1969), describe themselves as fat (Huenemann, Shapiro, Hampton, & Mitchell, 1966), diet more frequently (Gray, 1977), seek medical help for problems associated with weight (Waldron, 1983), and be less accepting of their overweight peers (Richardson, 1977; cited in Herman, Zanna, & Higgins, 1986).

Body Image in Relation to Physical Attractiveness

Evidence has accumulated to suggest a widespread body dissatisfaction, coupled with an intense desire to lose weight, amongst both eating-disordered and general college samples of women. Some theorists believe that the motive behind the desire to be thin is related to the notion that a thin body is attractive to the opposite sex.

Bruch (1978) and Garner, Rockert, Olmsted, Johnson, and Coscina (1985) have suggested that the media exerts intense pressure on women to conform to a standard of beauty involving an unrealistically thin body. They note that the average Miss America Pageant winner between the years of 1970 and 1980 was only in the 5th weight percentile for women between the ages of 20 and 29. Clearly, the underlying message being given is that attractiveness to others requires a very thin body shape. In a similar vein, Mazur (1986) has pointed out that whereas the 1983-1984 Miss USA contestants exhibited an average height of 5'7" and average weight of 115 pounds, the average Floradora chorus line woman of the early 1900's (i.e., similarly chosen for her beauty) stood only 5'4" tall, yet weighed 130 pounds. Such a finding
highlights the role that the prevailing culture plays in defining feminine beauty in terms of body shape and weight. *Playboy* magazine models have also changed drastically over time, allowing for the shift in men's opinions of the ideal feminine body. Garner, Garfinkel, Schwartz, and Thompson (1980) have noted that playboy models have become taller and thinner in the past 20 years, while the average American woman has become heavier. Banner (1983) suggests that the current extremely thin body ideal can be traced back to the 1960's when more voluptuous movie stars became a thing of the past, to be replaced by thin fashion models as the ultimate beauty ideals.

Not surprisingly, most women now view thinness as the most important ingredient of physical attractiveness (Berscheid et al., 1973; Horvath, 1981; Miller, Coffman, & Linke, 1980). Physical attractiveness, in turn, is a crucial ingredient of body image satisfaction (Cash et al., 1983; Cash et al., 1986; Hesse-Biber et al., 1987). In fact, Cooper and Fairburn (1987) have found that many eating-disordered women feel that other people evaluate them mainly on the basis of physical attributes. Other features, such as openness or a sense of humour, are not viewed as occupying a place of importance in the evaluation.

College women appear to possess similar opinions. Cash and Green (1986) reported that overweight college women felt larger and more unattractive than their peers. Feingold (cited in Cash & Pruzinsky, 1990) conducted a meta-analytic study of the relationship between women's looks and men's attitudes towards
them. He found that men's attitudes towards women were largely influenced by the women's physical attributes. Furthermore, there was a moderate and significant positive relationship between a woman's physical attractiveness and her dating popularity. Other findings have even suggested that physical attractiveness is predictive of more intimate and satisfying heterosexual interactions (Reis, Nezleck, & Wheeler, 1980; Reis et al., 1982). Like their eating-disordered counterparts, college women view physical attractiveness as a crucial element in the judgement of overall personal attractiveness (Franzoi, Kessenich, & Sugrue, 1989).

Working on the premise that body image disturbance and its accompanying drive for thinness are a product of a woman's desire to appear more attractive and hence more loveable to men, Fallon and Rozin (1985) examined 227 female and 248 male students enrolled in two introductory psychology classes at the University of Pennsylvania. Using the Figure Rating (FR) scale (adapted from Stunkard, Sorenson, & Schulsinger, 1983), each student was shown a set of nine same-sex figure drawings, ranging from very thin (i.e., score of 1) to very heavy (i.e., score of 9). They were asked to choose the figure that best represented their current figure, their ideal figure, and the figure they believed to be the most attractive to the opposite sex. Finally, they were shown the opposite-sex figure drawings and asked to select the figure they thought was the most attractive.

The findings of the study were both remarkable and
surprising. Men's ratings of their current, ideal, and attractive male figure did not significantly differ. However, women judged their current figure to be heavier than the figure they thought men would be attracted to, which was in turn heavier than their ideal figure. Finally, men actually preferred a heavier female figure than the one women thought they would prefer, while women actually preferred a less muscular male figure than men thought they would. In summary, this landmark study clearly called into question the belief that a woman's ideal body size is the one she thinks is the most attractive to men.

In an effort to discover how body size preferences develop over time, Cohn et al. (1987) replicated Fallon and Rozin's (1985) procedure, utilizing groups of male and female adolescents. A slightly different pattern of results were obtained. Girls tended to view their current figure as slightly, though not significantly, heavier than their ideal figure. However, their ideal figure was judged as significantly thinner than the one they thought would be most attractive to boys. Boys viewed their ideal figure as heavier than their current figure, which was, in turn, judged as being heavier than the one they thought would be most attractive to girls. Similar to the adult sample, the boys overestimated the male body size that girls actually find attractive, while girls underestimated the female body size that boys actually find attractive. However, unlike the adult sample, the boys and girls expressed similar levels of
body dissatisfaction, though the desired weight change was in opposite directions. Although the current body self-perceptions of the female samples in the two studies were comparable, the college women chose a thinner ideal figure and expressed more body dissatisfaction than did the adolescent girls. The authors have suggested that though self-perception of actual body size may be stable over time, the ideal figure that women strive towards becomes thinner as they mature. This increased pressure for thinness, however, appears to go above and beyond the desire to be attractive to the opposite sex.

Studies utilizing eating-disordered populations have obtained similar results. Leon, Lucas, Colligan, Ferdinande, and Kamp (1985) reported that although their sample of anorexics believed that they would be more attractive to men if they gained some weight, they nonetheless expressed the desire to lose more weight. It has also been shown that eating-disordered women have a tendency to exhibit greater degrees of body size distortion (Garner et al., 1976). In light of such findings and the fact that an average of 10-20% of female college students suffer from bulimia (Halmi et al., 1981), Zellner, Harner, and Adler (1989) have offered an alternate explanation to account for Fallon and Rozin's (1985) results. They suggested that the results may have been influenced by the existence of a substantial number of eating-disordered women within the female college student sample. If true, these women would most likely have possessed distorted images of their current, ideal, and attractive body figures,
which would have had a profound effect on the results. In an
effort to explore this possibility, the authors replicated Fallon
and Rozin's (1985) study, but divided their sample of female
college students into two groups based on the presence or absence
of abnormal eating behaviors.

All subjects were required to complete the Eating Attitudes
Test (EAT) developed by Garner and Garfinkel (1979). The EAT
consists of 40 items pertaining to eating-disordered behaviors
and attitudes. Subjects reply by stating how often each item
applies to them. Three factors are measured by the test: dieting
(i.e., in this case referring to persistent avoidance of high
caloric foods), binging/food preoccupation, and self control of
eating. Previous studies have shown a positive correlation
between total EAT scores and degree of body size overestimation
(Garner, Olmsted, Bohr, & Garfinkel, 1982). Zellner, Harner, and
Adler (1989) used a cutoff score of 28 to identify women who
displayed abnormal eating-related attitudes and behaviors (i.e.,
designated as high EAT women).

The 33 male and 57 female undergraduate students used in the
study were recruited through introductory psychology classes at
Shippensburg University, in Pennsylvania. All students first
completed the FR scale task in a manner similar to that utilized
by Fallon and Rozin (1985). The thinnest of the figures,
however, was assigned a score of 10, while the heaviest figure
was assigned a score of 90. The subjects indicated their choice
of a figure by selecting any whole number between 10 and 90. For
example, they could choose a score of 25, indicating an imaginary figure mid-way between figures 2 and 3. Once again, students were required to choose same-sex figures that corresponded to their current and ideal body images, as well as the one they presumed would be most attractive to the opposite sex. Next, they chose the opposite-sex figure they found most attractive. Finally, they completed the EAT.

Similar to Fallon and Rozin's (1985) results, the authors found that the female figure men actually found most attractive was heavier than the one women thought they would find most attractive. Also, the male figure that women actually found most attractive was less muscular than the one men thought they would prefer. In addition, there were no significant differences between the figures men chose as representing their current, ideal, and "most attractive to the opposite sex" body shapes. The high EAT women, who possessed abnormal eating-related behaviors and attitudes, exhibited a pattern of results identical to that of Fallon and Rozin's (1985) female sample. Their current figure was judged to be heavier than the figure they thought would be most attractive to the opposite sex, which was in turn heavier than their ideal figure. However, low EAT women, who demonstrated relatively normal eating-related behaviors and attitudes, exhibited a different pattern. Their current figure was judged to be heavier than their ideal figure, which was identical to the figure they thought would be attractive to men. In fact, women in both groups chose comparable "attractive to the
opposite sex" figures, but high EAT women chose an ideal figure that was much smaller than the one chosen by low EAT women. In summary, women possessing normal eating behaviors may desire weight loss in order to appear attractive to men, while no such clear relationship exists for women with abnormal eating patterns, who presumably have a different motive in mind for wanting to lose weight. This motive may be related to a desire to be perceived as socially competent.

**Body Image in Relation to Social Competence**

If the desire to lose weight is not related to a wish to be attractive to men, at least among women who exhibit abnormal eating behavior, the question remains as to the motivation behind such a desire. Several theorists have hypothesized that this motivation may be related to a desire to be perceived as competent.

Physical appearance is often the easiest available information about a person. In fact, people tend to sort others into various cognitive categories or prototypes based on physical attributes (Cash & Pruzinsky, 1990). Eagly, Ashmore, Makhijam, and Kennedy (1990) found that attractive men and women were viewed by others as being happier, more successful, smarter, more interesting, warmer, and more poised and sociable than their unattractive peers. The authors relate such a finding to the "beauty is good" stereotype, wherein attractive people are viewed as being socially skillful, outgoing, popular and likeable. On the other hand, obesity in women (i.e., commonly viewed as one
form of unattractiveness) is associated with downward social mobility (Goldblatt, Moore, & Stunkard, 1965), negative social interactions (Tiggemann & Rothblum, 1988), and much public criticism (Stake & Lauer, 1987).

Villmez, Eisenberg, and Carroll (1986) studied children's body size and its relationship to how others attributed competence to the child. They found that heaviness in girls was negatively related to the teacher's rating of the child's social, academic, and athletic competence. No such effect was observed with the sample of boys. Elaborating on this theme, Silverstein, Perdue, Peterson, Vogel, and Fantini (1986) suggested that a curvaceous body shape is commonly associated with femininity, which is, in turn, associated with a lack of intelligence and work-related incompetence.

Klienke and Staneski (1980) varied the bust sizes of women in various photographs. Those with the larger bust sizes were viewed by others as less intelligent, competent, moral, and modest than the women with the smaller bust sizes. Similarly, it has been suggested that successful women who stress the importance of scholastic achievement, higher education, and professional careers prefer less curvaceous, more narrow bodies (Beck, Ward-Hull, & McLear, 1976). Furthermore, women who believed that their fathers thought that they lacked intelligence desired thinner bodies than those who did not espouse such a belief (Silverstein et al., 1986). The authors hypothesized that the association between larger body sizes and a lack of perceived
intelligence may be an important predisposing factor of eating disorders in women. Such a finding would suggest that eating disorders are more common in educated, upper-middle class women aspiring to professional careers, due to a need to be deemed competent by others.

Hesse-Biber et al. (1987) reported that body image dissatisfaction is related to self-ratings of incompetence in psychological, social, and academic realms. In the 27-item measure used by the authors, psychological competence items pertained to positive personality characteristics, such as cheerfulness, originality, and a drive to achieve. Social competence items reflected positive personal characteristics related to social interactions, such as assertiveness, popularity, and social self-confidence. Academic competence items were related to positive academic skills, such as artistic and mathematical abilities. O'Brien (1991) found a similar relationship between body image dissatisfaction and a global rating of self-perceived incompetence in college women.

Not all researchers have found body image dissatisfaction to be related to such global ratings of low self-competence. Gibson and Thomas (1991), using the measure developed by Hesse-Biber and her colleagues (1987), found body image satisfaction to be positively related to self-ratings of social competence among college women. However, body image satisfaction was not significantly related to self-ratings of academic or psychological competence. Therefore, women who were dissatisfied
with their body shape presumably felt less popular, assertive, and socially confident than their peers. Interestingly enough, the relation between body shape and competence did not hold when subjects were required to rate the competence of other women, indicating that the shape-competence rule may only hold when applied to the self. Other studies have further demonstrated the link between body image dissatisfaction and perceptions of impaired social competence, social anxiety (Cash & Brown, 1987), and poor social relationships (Cash & Pruzinsky, 1990) that often accompany such a disturbance. The rewards associated with positive social interactions and self-confidence are perhaps a strong enough motive for women to want to lose weight.

**Purpose of the Present Study**

The high prevalence of eating disorders among college women is a cause of great concern for our society. Any educational attempt at preventing the development of eating disorders should concern itself with the motivation behind this desire to lose weight. The present study will attempt to provide insight into the nature of this motivation.

Previous studies have examined the relationship between body image disturbance and either physical attractiveness or social competence. The present study will attempt to provide a more complete picture of the relationship between physical attractiveness, social competence, and abnormal eating-related attitudes and behaviors.
The aims of the study are:

1) to examine the overall relationship between current, ideal, physically attractive, and socially competent body figures (i.e., as indicated by FR scale ratings), and abnormal eating behaviors (i.e., as measured by the EAT). More specifically, the factor most predictive of disturbed eating-related attitudes and behaviors will be identified.

2) to explore the hypothesis that as eating-related attitudes and behaviors become less pathological (i.e., as the EAT score decreases), the current, ideal, physically attractive, and socially competent body figures will tend to converge, representing a holistic body image concept. As eating-related attitudes and behaviors become more pathological (i.e., as the EAT score increases), the relationship between the body figure that is regarded as the ideal one and that regarded as the socially competent one will remain relatively unchanged, but the discrepancy between other body figures will increase, representing a more fragmented body image concept.

3) to identify other factors that may be related to the choice of an ideal body figure.
CHAPTER II
METHOD

Participants

One hundred and thirty-eight female undergraduate students, aged 18-24, were recruited from undergraduate psychology classes on a volunteer basis. All participants were rewarded for participation by receiving two extra credits towards their final class grade.

The mean age of the women in the sample was 19.9 years (SD = 1.2). The average number of years of university education was 1.4 (SD = 0.9). In terms of ethnicity, the sample was composed in the following manner: 76.1% Canadian of European origin, 10.1% Canadian of African origin, 4.3% Canadian of Asian origin, 3.6% Canadian of East Indian origin, 2.2% Canadian of Middle Eastern origin, 1.4% Canadian of Native North American origin, 1.4% Canadian of mixed origin, and 0.7% Canadian of Hispanic origin. The mean reported height of the sample was 65.3 inches (SD = 3.0), while the average reported weight was 135.8 pounds (SD = 20.8). Using a cutoff score of 30 on the EAT, 11.6% of the sample were designated as displaying abnormal eating-related attitudes and behaviors.

Measures

The Figure Rating scale and the Eating Attitudes Test were utilized in the current study. Although there is a paucity of data regarding the psychometric properties of most body image and eating behavior measures (Cash & Pruzinsky, 1990), available
psychometric data follows.

**Figure Rating scale.** The Figure Rating scale was devised by Stunkard, Sorensen, and Schulsinger (1983). Fallon and Rozin (1985) modified it for research use by adding ten point intervals between the nine figures to provide more flexibility in the selection of figures. In its present form, it consists of nine figures ranging from very thin (i.e., score of 10) to very heavy (i.e., score of 90), with ten point intervals between each figure (Zellner, Harner, & Adler, 1989).

The Figure Rating scale is a useful self-report method of assessing subjects' body shape perceptions in various situations. The present study utilized it to determine each subject's perception of her current and ideal body shapes, as well as the shapes at which she would feel most attractive to men, and most socially competent, respectively. The FR scale is easy to administer and simple to complete. It is ideal for group testing situations.

Validity studies of the FR scale have focused on its convergent validity. The discrepancy between the self-selected current figure and the ideal one is a useful index of body image dissatisfaction, with a large difference score indicating a great deal of dissatisfaction (Cash & Pruzinsky, 1990). Thomas and Freeman (1990) reported a correlation of -.66 between the current-ideal discrepancy of the FR and the Weight Concern subscale of the Body Esteem Scale (Franzoi & Shields, 1984), in which a high score is indicative of body image satisfaction.
Thompson and Altabe (1991) reported good convergent validity between the FR discrepancy score and three subscales of the Eating Disorder Inventory (EDI; Garner, Olmsted, & Polivy, 1983). The FR discrepancy score correlated .42 with the seven-item Bulimia subscale (i.e., which measures the tendency to binge, purge, and engage in other abnormal eating behaviors), .54 with the seven-item Drive for Thinness subscale (i.e., which measures fear of weight gain and a strong desire to lose weight), and .60 with the nine-item Body Dissatisfaction subscale (i.e., which measures the degree of dissatisfaction with various body parts like the waist and hips). Other researchers have agreed that the current-ideal discrepancy is a good measure of body image dissatisfaction (Williamson, Gleaves, Watkins, & Schlundt, 1993; Altabe & Thompson, 1992).

Thompson and Altabe (1991) examined the two week test-retest reliability of the FR scale among a group of college women. Current figure ratings were correlated by .86, ideal figures by .71, and figures believed to be most attractive to men by .60. These findings, taken in conjunction with the validity data, have prompted the authors to endorse the FR scale as a useful tool for body image disturbance research.

Eating Attitudes Test. The Eating Attitudes Test was devised by Garner and Garfinkel (1979). As noted previously (Garner et al., 1982), it consists of 40 self-report items concerning abnormal eating-related behaviors and attitudes that form three factors: dieting (i.e., relating to avoidance of
fattening foods and preoccupation with being thinner), binging/food preoccupation (i.e., reflecting bulimic activities and obsessive thoughts about food), and self control of eating (i.e., referring to rigid control of food intake and perceived pressure from others to gain weight). The authors recommend a cutoff score of 30 to identify those possessing abnormal eating-related behaviors and attitudes (Garner & Garfinkel, 1979). The EAT is easy to administer and complete, and is therefore ideal for group testing situations.

Validity studies have typically centred on the criterion and convergent validity of the EAT. Gross, Rosen, Leitenberg and Willmuth (1986) reported that bulimic women scored significantly higher than did controls on the Dieting and Binging/Food Preoccupation subscales, as well as the total scale score. Further evidence of the EAT's criterion validity has been provided by Raciti and Norcross (1987), who indicated that the EAT identified 12% of college women as possessing abnormal eating behavior. This is in accordance with the most recent estimates that between 6% and 13% of college women suffer from an eating disorder (Button & Whitehouse, 1981; Clarke & Palmer, 1983; Garner & Garfinkel, 1979; Garner & Garfinkel, 1980). Convergent validity of the EAT has been established in relation to total EDI score and the three EDI subscales that relate to eating disorders. Total EAT scores correlated between .79 and .81 with the Drive for Thinness subscale, .50 with the Body Dissatisfaction subscale, .42 with the Bulimia subscale, and .66
with the total EDI score (Gross, Rosen, Leitenberg, & Willmuth, 1986; Raciti & Norcross, 1987). Finally, Schmolling (1988) reported some evidence for the discriminant validity of the EAT, stating that total EAT scores were not significantly related to socioeconomic status.

The EAT has exhibited good reliability with regard to internal consistency, with a Cronbach alpha of .86 (Raciti & Norcross, 1987).

**Procedure**

Oral information about the study was read out to undergraduate psychology students (Appendix A). A sign-up sheet listing various group testing sessions was then circulated, and interested students were instructed to sign their names under the session they wished to attend.

Upon arrival for the testing session, participants were required to complete a consent form (Appendix B) and a short demographic questionnaire (Appendix C). Subsequently, each participant completed the Figure Rating scale by choosing: a) the figure that she thinks best represents her current shape, b) the figure that best represents her ideal shape (i.e., the way she would like to look), c) the figure that best represents her as she thinks she would be most attractive to men, and d) the figure that best represents her as she would feel most popular, confident, and assertive in social interactions. Participants were then required to complete the Eating Attitudes Test and to respond to the open-ended question "What factors are important to
you in determining your ideal body size and shape?". Before leaving, they were asked not to discuss the study with their peers, but told that they could receive research results upon completion of the study.
CHAPTER III

RESULTS

This chapter contains the information obtained from the two standard multiple regression analyses that were used to examine the quantitative data, as well as the qualitative information gathered in response to the open-ended question. The first section deals with the data obtained from the first regression equation, in which the four FR scores are used to predict EAT scores. Information derived from the second regression equation, in which the six FR difference scores are used to predict EAT scores, is presented in the second section. The third section examines the pattern of relationships between the FR scores as the EAT score becomes more indicative of abnormal eating-related attitudes and behaviors. Qualitative information identifying other factors that may be related to the ideal body figure comprises the final section.

First Multiple Regression Analysis

Table 1 contains the means and standard deviations of the EAT score and the 4 FR scores used in the first regression equation. Table 2 presents an intercorrelation matrix of Pearson product-moment correlations between these variables. Only the current FR score is significantly related to the EAT score, so that more pathological eating behaviors tend to be related to larger self-perceived current sizes. The four FR scores are themselves highly intercorrelated.

A standard multiple regression analysis was conducted in
<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAT</td>
<td>15.90</td>
<td>12.42</td>
</tr>
<tr>
<td>CUR</td>
<td>35.87</td>
<td>9.97</td>
</tr>
<tr>
<td>IDE</td>
<td>27.85</td>
<td>5.96</td>
</tr>
<tr>
<td>ATT</td>
<td>26.93</td>
<td>5.63</td>
</tr>
<tr>
<td>SC</td>
<td>27.69</td>
<td>6.06</td>
</tr>
</tbody>
</table>

EAT  = Eating Attitudes Test score  
CUR  = Current Figure Rating score  
IDE  = Ideal Figure Rating score  
ATT  = Attractive Figure Rating score  
SC   = Socially Competent Figure Rating score
Table 2

Product-Moment Correlations between Variables in MR Equation 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>CUR</th>
<th>IDE</th>
<th>ATT</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAT</td>
<td>.32&quot;</td>
<td>-.14</td>
<td>.08</td>
<td>-.09</td>
</tr>
<tr>
<td>CUR</td>
<td>-----</td>
<td>.58&quot;</td>
<td>.31'</td>
<td>.39&quot;</td>
</tr>
<tr>
<td>IDE</td>
<td>-----</td>
<td></td>
<td>.55&quot;</td>
<td>.70&quot;</td>
</tr>
<tr>
<td>ATT</td>
<td>-----</td>
<td></td>
<td></td>
<td>.69&quot;</td>
</tr>
<tr>
<td>SC</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .0002  "p < .0001
which the current, ideal, attractive, and socially competent FR scores were used to predict EAT scores. These 4 predictors accounted for 30.6% of the variance of the EAT scores ($R^2 = 0.306, p< .0001$).

Semi-partial correlation coefficients were calculated for each of the predictors in an effort to examine the unique contribution of each predictor to the variance accounted for by the model and in order to address the problem of high intercorrelations between the predictors. Table 3 displays the squared semi-partial correlation coefficients of the 4 FR scores and their correspondent F values. The current FR score emerged as the best predictor, accounting for 24.4% of the variance. The ideal FR score explained another 11.8% of the variance.

**Second Multiple Regression Analysis**

Table 4 contains the means and standard deviations of the EAT score and the 6 FR difference scores utilized in the second regression equation. Table 5 displays the intercorrelation matrix of Pearson product-moment correlations between these variables. Several of the FR difference scores are highly correlated with one another.

A second standard multiple regression analysis was performed. The six FR difference scores were used to predict EAT scores. These 6 predictors accounted for 34.1% of the variance of the EAT scores ($R^2 = 0.341, p< .0001$).

Once again, semi-partial correlation coefficients were calculated for each of the predictors in an effort to examine the
Table 3

Squared Semi-Partial Correlations and F Values of the 4 FR Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>$sr^2$</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUR</td>
<td>0.244</td>
<td>14.34**</td>
</tr>
<tr>
<td>IDE</td>
<td>0.118</td>
<td>6.91*</td>
</tr>
<tr>
<td>ATT</td>
<td>0.043</td>
<td>2.50</td>
</tr>
<tr>
<td>SC</td>
<td>0.008</td>
<td>0.47</td>
</tr>
</tbody>
</table>

*p < .01,  **p < .001

$sr^2 = $ squared semi-partial correlation coefficient
Table 4

Means and Standard Deviations of Variables Used in MR Equation 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAT</td>
<td>15.90</td>
<td>12.42</td>
</tr>
<tr>
<td>CURIDE</td>
<td>8.69</td>
<td>7.44</td>
</tr>
<tr>
<td>CURATT</td>
<td>10.51</td>
<td>8.09</td>
</tr>
<tr>
<td>CURSC</td>
<td>9.98</td>
<td>7.49</td>
</tr>
<tr>
<td>IDEATT</td>
<td>3.33</td>
<td>4.45</td>
</tr>
<tr>
<td>IDESC</td>
<td>2.68</td>
<td>3.83</td>
</tr>
<tr>
<td>ATTS C</td>
<td>2.34</td>
<td>4.07</td>
</tr>
</tbody>
</table>

EAT = Eating Attitudes Test score

CURIDE = Current - Ideal difference score

CURATT = Current - Attractive difference score

CURSC = Current - Socially Competent difference score

IDEATT = Ideal - Attractive difference score

IDESC = Ideal - Socially Competent difference score

ATTS C = Attractive - Socially Competent difference score
Table 5
Product-Moment Correlations between Variables in MR Equation 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>CURIDE</th>
<th>CURATT</th>
<th>CURSC</th>
<th>IDEATT</th>
<th>IDESC</th>
<th>ATTSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAT</td>
<td>.50***</td>
<td>.30**</td>
<td>.42***</td>
<td>.16</td>
<td>-.01</td>
<td>.22**</td>
</tr>
<tr>
<td>CURIDE</td>
<td>------</td>
<td>.81***</td>
<td>.86***</td>
<td>.13</td>
<td>-.14</td>
<td>.18*</td>
</tr>
<tr>
<td>CURATT</td>
<td>------</td>
<td>------</td>
<td>.87***</td>
<td>.36***</td>
<td>-.02</td>
<td>.21*</td>
</tr>
<tr>
<td>CURSC</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>.26**</td>
<td>.04</td>
<td>.19*</td>
</tr>
<tr>
<td>IDEATT</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>.39***</td>
<td>.46***</td>
</tr>
<tr>
<td>IDESC</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>.22*</td>
</tr>
<tr>
<td>ATTSC</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
</tbody>
</table>

*p < .05  "p < .01  ""p < .0001
unique contribution of each predictor to the variance accounted for by the model and as a means of dealing with the high intercorrelations between several of the predictors. Table 6 displays the squared semi-partial correlation coefficients of the 6 FR difference scores and their correspondent F values. The current-ideal FR difference score was the best predictor, accounting for 10.5% of the variance. The current-attractive FR difference score explained another 6.9% of the variance.

**Pattern of Relationships between FR Scores as EAT Score Increases**

A close examination of the first row of values in Table 5 yields important information about the nature of the relationships between the FR scores as the EAT score increases, becoming more indicative of abnormal eating-related attitudes and behaviors.

There is a positive correlation between the EAT score and all but one of the FR difference scores. As expected based on semi-partial correlation coefficients, the current-ideal FR difference score has the strongest relationship with the EAT score. Both the current-attractive and current-socially competent FR scores are significantly related to the EAT score. As the EAT score increases, becoming more indicative of abnormal eating concerns, the discrepancy between current and socially competent body figures is even more significant than that between the current and attractive ones. Similarly, the figures judged to be most attractive and most socially competent become more discrepant as EAT scores increase. The ideal and attractive
Table 6
Squared Semi-Partial Correlations and F Values of the 6 FR Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>$sr^2$</th>
<th>F value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURIDE</td>
<td>0.105</td>
<td>7.15&quot;</td>
</tr>
<tr>
<td>CURATT</td>
<td>0.069</td>
<td>4.71'</td>
</tr>
<tr>
<td>CURSC</td>
<td>0.013</td>
<td>0.86</td>
</tr>
<tr>
<td>IDEATT</td>
<td>0.019</td>
<td>1.26</td>
</tr>
<tr>
<td>IDESC</td>
<td>0.000</td>
<td>0.01</td>
</tr>
<tr>
<td>ATTSC</td>
<td>0.006</td>
<td>0.40</td>
</tr>
</tbody>
</table>

* $p<.05$  \quad ** $p<.01$

$sr^2 = $ squared semi-partial correlation coefficient
figures follow this trend of becoming more discrepant as EAT scores increase, falling just short of significance (p < 0.0562).

Only the ideal and socially competent body figures fail to diverge as EAT scores increase, revealing the powerful but subtle meaning of the socially competent body figure construct. Though the socially competent body figure is not significantly related to the EAT, and therefore not surprisingly contributes little unique variance to the model, it is the one construct that remains related to an individual's ideal body image, regardless of whether or not that individual possesses abnormal eating-related attitudes and behaviors. In the case of more pathological eating concerns, its relative importance increases as the figure judged to be most attractive becomes more discrepant from that seen as the ideal one.

Qualitative Data

Responses to the question "What factors are important to you in determining your ideal body size and shape?" revealed various common themes. The desire to obtain a healthy body was reported by 42.0% of the participants, while increased self-confidence was a factor for 40.6%. The goal of being able to wear current fashionable clothing was reported by 37.7%, while a desire to appear attractive to men was cited by 24.6%. Other reasons listed were: the desire for compliments concerning one's body (16.7%), the goal of improving athletic performance (7.2%), the aim of being more physically attractive than one's female counterparts (6.5%), the desire to please one's family members
(3.6%), the aspiration of increased popularity (2.2%), the goal of acquiring increased energy levels (1.4%), and the desire to have control over one's body and its appearance (1.4%).
CHAPTER IV

DISCUSSION

Three sections of discussion follow. The first focuses on the meaning of the major quantitative results of the study and compares these findings with previous ones of a similar nature. The second section examines the significance and implications of the preliminary qualitative data that was collected. The final section discusses limitations of the current study and directions for future research.

Abnormal Eating Attitudes in Relation to Social Competence

The present study identified 11.6% of the sample as possessing abnormal eating-related attitudes and behaviors, based on a cutoff score of 30 on the EAT. This finding is in keeping with that of Halmi et al. (1981), who reported that 13% of their college sample evidenced eating behaviors and concerns consistent with a diagnosis of bulimia. Similarly, Raciti and Norcross (1987), utilizing the EAT with a cutoff score of 30, reported abnormal eating behaviors and weight concerns in 12% of their female college population, and an overall average EAT score of 16.7, consistent with that of 15.9 in the current study. Clarke and Palmer (1983) also reported a comparable finding, with 11.5% of their female university sample evidencing pathological eating concerns as measured by a cutoff score of 30 on the EAT. Finally, Zellner et al. (1989), using the more lenient cutoff score of 28 on the EAT, identified 16% of their female college sample as possessing abnormal eating-related attitudes and
behaviors. For the present study, utilizing the more lenient
cutoff score of 28 results in 15.2% of the sample being
identified as possessing pathological eating concerns.

The above-mentioned results are a cause for concern in light
of the fact that the other studies cited were conducted 6 to 14
years ago. Despite the increased attention given to the issue of
eating disorders and their deleterious consequences, incidence
rates in the female college population remain relatively
unchanged.

The present study's average current, ideal, and attractive
FR scores of 35.87, 27.85, and 26.93, respectively, are
strikingly similar to the 36.4, 27.9, and 29.2 reported by Fallon
and Rozin (1985), and the 34.79, 27.47, and 28.32 reported by
Zellner et al. (1989). Overall, women in the present study are
reporting current body figures that are comparable to those
reported in earlier studies. In addition, they are indicating
preferences for ideal and attractive body figures that are
smaller than their current figures, and similar to those chosen
by the women in the earlier studies. The notions of attractive
and desired body figures do not appear to have changed
appreciatively since the earlier studies.

The best predictors of eating-related attitudes and
behaviors are the current FR score and the current-ideal FR
difference score. The current FR score is a cognitive appraisal
measure of one's present body size (i.e., how big one believes
one's body to be). Body image dissatisfaction is measured by the
current-ideal FR difference score. Higher current FR scores and current-ideal FR difference scores are associated with more abnormal eating-related attitudes and behaviors as measured by the EAT. Such findings are consistent with that of Halmi et al. (1981) who reported that those possessing pathological eating concerns (i.e., meeting the criteria for bulimia in the study) tended to be at the heavy end of the normal weight range. Furthermore, Cash and Green (1986) have found that overweight women do not significantly distort self-perceptions of their body size, accurately perceiving themselves as heavier than their average and normal weight counterparts. They do, however, evidence higher levels of body image dissatisfaction. Bulimics have also been found to possess higher levels of body image dissatisfaction than normal controls (Katzman & Wolchik, 1984). Body image dissatisfaction is, in fact, one consistent aspect of pathological eating-related attitudes and behaviors (Cash & Pruzinsky, 1990). In light of these previous studies, the present findings are not surprising.

The other major finding of this study is that as eating-related attitudes and behaviors become less pathological, the current, ideal, attractive, and socially competent body figures tend to converge, representing a relatively holistic body image concept. However, as these eating-related attitudes and behaviors become more pathological, the ideal body image construct diverges from the current and attractive ones. Body image dissatisfaction increases, and the body figure judged to be
most attractive becomes more discrepant with that chosen as one's ideal body figure. In essence, the body figure concept becomes more fragmented, with only the socially competent body figure remaining related to the choice of an ideal one. In a similar vein, Katzman and Wolchik (1984) reported that bulimics evidenced lower self-esteem scores and a greater need for approval than their non-eating-disordered counterparts, thereby evidencing social competence concerns.

The question remains as to why there should exist such a link between social competence and a thin ideal body figure. One factor that may help explain such an association is the previously-mentioned negative social ramifications of obesity, including downward social mobility (Goldblatt, Moore, & Stunkard, 1965), negative social interactions (Tiggemann & Rothblum, 1988), and public criticism (Stake & Lauer, 1987). Women in general, but especially those at risk for the development of an eating disorder, may believe that successful social interactions require a thin body size. Perhaps for them, the thin body is no longer merely the physically attractive one, but has come to be irrevocably linked to success and happiness itself, both of which are acquired via social interactions. The role of media presentations in this belief system is a complex issue that precludes a simple cause and effect relationship. Further research is clearly needed in this area. Ultimately, the role of social competence concerns in the genesis of pathological eating-related attitudes and behaviors must be incorporated as a key
aspect of programs aimed at the prevention and treatment of eating disorders.

Significance and Implications of Preliminary Qualitative Data

As previously mentioned, when women were asked to indicate the reasons for their choice of ideal body figure, the most cited factor was a desire for a healthy body. It is tempting to believe that the extensive information about the dangers of eating disorders has finally had some impact on the young women most at risk. However, closer examination will likely reveal this belief to be overly optimistic. In the current study, the proportion of women displaying abnormal eating-related concerns remains unchanged from previous studies that were conducted up to 14 years ago. Furthermore, several women in the present study went beyond saying that they wanted a "toned" body to indicating that they desired one that was all muscle and no fat. That such an ideal body is any more healthy or realistic than an extremely thin one remains questionable. Even if the ideal body figure of the majority of the women is realistic and healthy, the average EAT score of 15.90 calls into question whether the means of achieving this body figure and the eating attitudes related to these means are healthy. Furthermore, the average current-ideal FR difference score of 8.69 reveals that the women in the sample are still manifesting a significant degree of body image dissatisfaction, one of the risk factors for the development of an eating disorder.

The second most endorsed reason for the choice of ideal body
figure is to achieve increased self-confidence. Similar to the case of the social competence findings, one is left wondering as to the link between body size and self-confidence. Once again, the media likely plays a role, typically presenting successful, assertive women as thin. How "self-confident" body size relates to the socially competent one remains to be seen.

Another reason often cited for the choice of ideal body figure is the desire to be able to confidently wear currently fashionable clothing. Many of the women in the study are upset by the fact that such clothing does not fit them properly, though they also recognize that it is designed for the "perfect" figure of the fashion model. Future research endeavours may do well to examine the complex relationship between fashion and eating disorders. The motivation behind the fashion industry's continual depiction of an unrealistically thin ideal body should also be examined.

Though not as frequently mentioned as the above reasons, the goal of appearing attractive to men and the desire to receive compliments from others about one's body were both mentioned by a significant number of women as factors related to their choice of an ideal body figure. Both were viewed as important sources of self-esteem. That a woman's worth should be so strongly dependent on other people's like or dislike of her body is a sobering statement about our society. Eating disorder treatment and prevention programs must address this issue and remind women of other qualities, besides their bodies, that make them
worthwhile. Internal sources of self-esteem, rather than dependence on other people's opinions, should also be stressed.

Though the goals of improving athletic performance, being more energetic, pleasing one's family members, controlling one's body, and being more attractive than one's peers were cited by some women as important factors in the choice of ideal body figure, they do not appear to be of significance for the majority of women in the sample. However, future investigations may benefit from an examination of the role they play in the choice of ideal body figure and the means of achieving it for women to whom these factors apply.

Limitations of Present Study and Directions for Future Research

The only question about social competence that was included in the current study is the one that asked respondents to choose the FR scale body figure that they thought would be most popular, confident, and assertive in social interactions. In light of the finding that social competence remains a stable concern in the choice of ideal body figure regardless of whether or not eating-related attitudes and behaviors are pathological, future research should endeavour to examine the social competence construct in more detail. A scale that measures current and desired levels of social competence would be particularly useful. It may also be helpful to break social competence up into various components such as assertiveness, self-confidence, and feelings of popularity in social situations. Furthermore, the social situations themselves could be more specific. For example,
perceived levels of social competence may vary depending on whether the social situations involve same versus opposite sex interactions, or work-related versus leisure time scenarios. Developmental patterns of social competence may be examined, as well as its relationship to other qualities of potential importance, such as perceived intelligence, for example. Finally, the role of the media in relating social competence to body size must be examined more closely. If future findings continue to highlight the important role played by social competence in the development of eating disorders, prevention and treatment programs must address these concerns.

The present study included only undergraduate college women aged 18 to 24. Future research would benefit from utilizing other sample groups. Whether the current findings hold for women who are not attending university, as well as older and younger ones, remains to be seen. Whether or not social competence concerns are related to abnormal eating behaviors in actual clinical groups, such as those suffering from anorexia, bulimia, and obesity, is also an important question. Finally, the role of social competence in the choice of men's ideal body figures may be an interesting and fruitful avenue of research.

Examination of the relationship between ideal body figure and the factors implicated in the qualitative research is another important area that needs study. Better understanding of these factors and their origins may be of aid in the treatment and prevention of eating disorders.
APPENDIX A

ORAL RECRUITMENT INFORMATION
Christine O'Connors, a second year Master's student in the Clinical Psychology program at the University of Windsor, is conducting research investigating eating-related attitudes and behaviours in college women. The study will also examine body image attitudes as they relate to physical attractiveness and social competence. She is looking for women, between the ages of 18 and 25, to participate in this study. Participants will be asked to complete questionnaires related to the above topics, a task requiring approximately one and a half hours. They will receive two bonus points towards their final Psychology grade. I will be passing around a sign-up sheet for anyone interested in participating in the study. Please remember to write down the date, time, and location of the session you sign up for.
APPENDIX B

CONSENT FORM
Participant Information and Instructions

My name is Christine O'Connor. I am a second year Master's student enrolled in the Clinical Psychology graduate program at the University of Windsor. As part of my program requirements, I am conducting research, under the supervision of Dr. W. Balance, investigating eating-related attitudes and behaviours in college women. I am also studying body image attitudes as they relate to physical attractiveness and social competence. If you agree to participate in this research, you will be asked to fill out some questionnaires related to these topics. Please read the instructions carefully, and complete the questionnaires as honestly as you can. There are no right or wrong answers to any of the questions.

The questionnaires will take approximately one and a half hours to complete. You will receive 2 credits towards your Introductory Psychology final grade as compensation for your time. Your participation is completely voluntary, and you are free to withdraw from the study at any time without explanation or penalty. At any time before, during, or after completing the questionnaires, I will be pleased to answer any questions you may have about the study. Once the study has been completed, the findings will be made available to you upon request.

If, in answering these questions, personal concerns arise, please do not hesitate to contact me or my supervisor, Dr. W. Balance, at the University of Windsor Psychology Department, at 253-4232, extension 2217. Any complaints you may have about the research may be addressed to Dr. R. Engelhart, Chair of the Psychology Department Ethics Committee, at 253-4232, extension 2222.

Consent to Participate

I have read and understood the above information, and I agree to participate in the research procedures as outlined. I understand that my responses to the questionnaires will be kept completely confidential, identified only by a research code number. I know that I am to retain a copy of the above information for my own records.

DATE: __________________________

SIGNATURE: __________________________
APPENDIX C

DEMOGRAPHIC QUESTIONNAIRE
DEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions.

1. Age: _______

2. Height (in feet or centimetres): _______

3. Weight (in pounds or kilograms): _______

4. Total number of years of university education: _______

5. Ethnic group (please circle one):
   
a) Caucasian
   
b) African American
   
c) Oriental
   
d) Native Canadian
   
e) Other (please specify): ________________
REFERENCES


VITA AUCTORIS

Christine L. O'Connor was born on October 18, 1968. In June, 1986 she graduated from Howard S. Billings Regional High School, Chateauguay, Quebec and received the Birks Gold Medal Award. She completed her C.E.G.E.P. requirements at Marianopolis College in June, 1988 with a D.E.C. in General Sciences. In May, 1991 she was granted a Bachelor of Science Honours degree from McGill University. From October, 1991 to May, 1993 she was employed as a full-time research assistant for the McGill University - Douglas Hospital Alcohol Research Program. Since September, 1993 she has been enrolled in the Master's programme in Adult Clinical Psychology at the University of Windsor.