The etiology of bulimia nervosa from a psychodynamic socio-cultural perspective

1988

Michael John Hryckowian

University of Central Florida

Find similar works at: https://stars.library.ucf.edu/rtd

University of Central Florida Libraries http://library.ucf.edu

STARS Citation

https://stars.library.ucf.edu/rtd/4290

This Masters Thesis (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.
THE ETIOLOGY OF BULIMIA NERVOSA
FROM A PSYCHODYNAMIC SOCIO-CULTURAL
PERSPECTIVE

BY

MICHAEL JOHN HRYCKOWIAN
B.A., Baldwin-Wallace College, 1982

THESIS

Submitted in partial fulfillment of the requirements
for the Master of Science degree in Clinical Psychology
in the Graduate Studies Program
of the College of Arts and Sciences
University of Central Florida
Orlando, Florida

Summer Term
1988
ABSTRACT

The present research examined the etiology of bulimia nervosa from a psychodynamic perspective. The Eating Disorder Inventory (EDI) and Bem Sex Role Inventory (BSRI) were used to compare bulimics and controls on a number of personality dimensions including drive for thinness, body shape dissatisfaction, interoceptive awareness (one's lack of confidence in identifying emotions or visceral sensations) and sex role identification. Using the appropriate scales on the EDI, it was hypothesized that bulimics would demonstrate a higher drive for thinness and more body dissatisfaction than controls and that they would possess poorer interoceptive awareness than controls. In agreement with the dynamic position, it was also believed that bulimics would identify more strongly with the traditional female role than controls and hence obtain a more "feminine" rating on the BSRI. The present data, consistent with expectations, revealed that bulimics have a higher drive for thinness, greater body dissatisfaction and poorer interoceptive awareness than controls. There is also support for the hypothesis by Bruch (1982) that bulimia is a result of the person's inability to differentiate between emotional tension and physical hunger. The present data indicate somewhat paradoxical results regarding sex role identification in that bulimics are much more polarized in
their sex role identification than controls (classified more as masculine or feminine with few androgynous). This suggests that bulimia may in fact be a heterogenous disorder, comprised of those in whom it is a variant of anorexia nervosa and those in whom it is a distinct clinical entity. The author cautions that the present results are based on a rather small sample and recommends further research with larger samples.
ACKNOWLEDGEMENTS

There are many people to whom I am deeply indebted for their help and support in completing both this research and obtaining my Master's degree. I would like to thank Drs. John McGuire and Don Eaker of my committee for their support, encouragement and helpful comments in completing this thesis. My warmest appreciation is extended to my Chairperson, Dr. Burton Blau, who went far beyond the duties inherent in that role in assisting in the completion of this research.

I would also like to thank Dr. Don Eaker and Kimberly Brooks, M.S., who made this research possible by providing subjects that were at times difficult to obtain.

I would also like to thank my stepfather, Mr. Frank Bartolo, for providing me with the opportunity to be the first person in my family to obtain undergraduate and graduate degrees. My deepest love and appreciation to my mother Mary Bartolo, whose support, encouragement, sacrifices and prayers epitomize all that a mother should be.

Finally, I wish to thank the Father, Son and Holy Spirit for allowing me this opportunity for "With men this is impossible; but with God all things are possible."
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>STATEMENT OF THE PROBLEM</td>
<td>14</td>
</tr>
<tr>
<td>METHOD</td>
<td>15</td>
</tr>
<tr>
<td>RESULTS</td>
<td>24</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>27</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>34</td>
</tr>
<tr>
<td>A. BEM SEX ROLE INVENTORY</td>
<td>35</td>
</tr>
<tr>
<td>B. EATING DISORDER INVENTORY</td>
<td>38</td>
</tr>
<tr>
<td>C. EATING PROBLEMS QUESTIONNAIRE</td>
<td>42</td>
</tr>
<tr>
<td>D. TABLES 1 AND</td>
<td>47</td>
</tr>
<tr>
<td>E. TABLE 3</td>
<td>49</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>51</td>
</tr>
</tbody>
</table>
INTRODUCTION

Bulimia nervosa is a syndrome which has received much attention in both the public and professional literature during recent years. Although this increased attention implies that it is a recent phenomenon, historical review indicates that bulimia or "binge eating" has existed for centuries (Boskind-White & White, 1986). Views concerning the relationship between attractiveness and body weight have fluctuated throughout history, especially in regard to feminine beauty (Boskind-White & White, 1986). Both Greek and Roman cultures favored slender women, and women would go to great lengths to achieve the desired figure (Boskind-White & White, 1986). With hardy appetites, the problem soon became finding a way to overeat and still maintain a desired body weight. To help achieve this end, the Romans invented the "vomitorium," a place where people engaged in self-induced vomiting to relieve themselves following food gorging (Boskind-White & White, 1986).

Boskind-Lodahl (1976) witnessed this same type of aberrant eating behavior pattern in young women seeking counseling who did not meet diagnostic criteria of the Diagnostic and Statistical Manual of Mental Disorders, Second Edition (American Psychiatric Association, 1968). These women, whose weights were within normal limits, engaged in the cyclic behavior of binging on large quantities of food only
to purge themselves of this food through a variety of techniques including vomiting, laxatives, diuretics and continual dieting (Boskind-Lodahl, 1976). The term "bulimarexia" was coined to describe these individuals in which binge eating was characteristically followed by some weight reduction activity. This pattern of eating and purging was subsequently delineated as a separate, distinct diagnostic entity and incorporated into the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (American Psychiatric Association, 1980) under the heading of Bulimia Nervosa.

Bulimia nervosa is currently defined in the DSM-III (American Psychiatric Association, 1980) as a form of eating disorder with the following diagnostic criteria:

A. Recurrent episodes of binge eating (rapid consumption of large amount of food in a discrete period of time, usually less than two hours).

B. At least three of the following:
   (1) consumption of high-caloric, easily ingested food during a binge
   (2) inconspicuous eating during a binge
   (3) termination of such eating episodes by abdominal pain, sleep, social interruption, or self-induced vomiting
   (4) repeated attempts to lose weight by severe restrictive diets, self-induced vomiting, or use of cathartics or diuretics
   (5) frequent weight fluctuations greater than ten pounds due to alternating binges and fasts

C. Awareness that the eating pattern is abnormal and fear of not being able to stop eating voluntarily.

D. Depressed mood and self-deprecating thoughts following eating binges.

E. The bulimic episodes are not due to Anorexia Nervosa or any other known physical disorder (pp. 70-71).
The prevalence of bulimia is largely unknown due to the secrecy surrounding the bouts of uncontrolled eating (binging) and purging (Schlesier-Stropp, 1980). Furthermore, family, friends and medical personnel are often unable to detect the disorder because the individual's shape and weight usually remain within normal limits and eating habits in social situations are appropriate and controlled (Fairburn & Cooper, 1982). Estimates of the frequency of bulimia among American women are inconsistent for a number of reasons. One important reason is that there is still no consensus in the field on what constitutes a diagnosis of bulimia. Though DSM-III appears to clearly delineate the clinical syndrome, closer analysis reveals considerable ambiguity. For example, DSM-III diagnostic criteria begin with "Recurrent episodes of binge eating...." Does one interpret "recurrent" as daily, weekly, monthly, etc? Another example is how one defines a "binge." In designing bulimia questionnaires, some researchers try to define a binge in terms of the amount of food eaten while others focus on the manner in which food is eaten (Mitchell & Pyle, 1985). Described in caloric terms, research shows that what have been described as "binges" can range between 1000 and 55,000 calories (Mitchell & Pyle, 1985), while Johnson et al. (1983) cite 4,800 calories as the average binge. Foods most commonly ingested are high carbohydrate or high fat foods that are easy to eat and require little preparation.
and chewing such as ice cream, candy, etc. (Mitchell & Pyle, 1985). Although taking place any time of the day, most binging takes place late in the day after work or school (Mitchell & Pyle, 1985). The American Psychiatric Association (1980) cites the duration of a binge as less than two hours while Mitchell and Pyle (1985) report a range of 15 minutes to 8 hours. With such ambiguity, it is not surprising to find considerable disparity in estimates of prevalence. Strangler and Printz (1980) found that 3.8% of students visiting a university mental health center had received a DSM-III diagnosis of bulimia. Data on the incidence of binge-eating are quite high among college females. Hawkins and Clement (1980) report an incidence rate of 80%; Halmi, Falk and Schwartz (1981) noted 68.1%; and Mitchell and Pyle (1985) reveal 47%. When rigorous DSM-III criteria are used, the percentages decline, with current estimates of incidence rates between 8% and 14% of the female college population (Mitchell & Pyle, 1985).

Despite ambiguity in some areas, there is general agreement that the age of onset of the binge eating in bulimia is usually adolescence or early adult life and the disorder is seen primarily in females (American Psychiatric Association, 1980). Fairburn and Cooper (1982) have found 18 to be the most frequent age of symptom appearance, while Boskind-Lodahl (1976) found 15 to be the mean age of onset of symptoms. Generally, the binging and purging episodes do
not appear at the same time, with the onset of binge eating occurring approximately one year prior to the appearance of purging (Fairburn & Cooper, 1982). Halmi et al. (1981) have shown that females who were previously overweight were at high risk for development of bulimia. Also at high risk were dieters; studies reported that between 34% and 88% of bulimics stated onset of symptoms following a period of dieting (Abraham & Beaumont, 1982; Fairburn, 1982; Johnson, Stuckey, Lewis, & Schwartz, 1983).

Other associated factors that accompany bulimia are depression, both in the patient and family members, impulsivity and substance abuse. Hatsukmani, Owen, Pyle, and Mitchell (1982) reported a mean depression score (Scale 2) of 70.9 on the Minnesota Multiphasic Personality Inventory (MMPI) as indicative of depression in their sample of 52 female bulimic subjects. Hudson, Pope, Jonas, and Yurgelum-Todd (1983) found that 80% of their sample of 49 bulimics (including 4 males) met diagnostic criteria for a DSM-III diagnosis of Major Affective Disorder. Patients also frequently suffer from a wide range of impulse control problems such as shoplifting and other petty thievery (Mitchell & Pyle, 1985). Pyle, Mitchell, Eckert, Halvorson, Neuman, and Goff (1983) reported bulimic college students as much more likely to admit to stealing than nonbulimic students. Substance abuse is also sometimes seen in bulimics, with Pyle, Mitchell, and Eckert (1981) reporting 8
of 34 cases and Herzog (1982) citing 10 of 30 cases in their bulimic groups as having undergone previous substance abuse treatment.

Despite the apparent prevalence of bulimia in society, the theories describing its etiology are much less complete than for other eating disorders, such as anorexia nervosa. One explanation is that many consider bulimia to be a variant of anorexia nervosa and not a distinct disorder in and of itself (Russell, 1979). Current conceptions of the development of bulimia are found in three theories: psychodynamic, socio-cultural, and cognitive-behavioral.

The psychodynamic interpretation of bulimia is both similar to and different from the explanation for the development of anorexia nervosa. The psychodynamic perspective is not unified and reflects individual theorists' adherence to a particular variant of dynamic psychology (i.e., drive model vs. object relations). In classic drive psychology, eating is symbolic to libidinal drives. According to Lindner (1955), in contrast to the anorexic who fears pregnancy through oral impregnation, the bulimic desires pregnancy. In this case, there is also a hatred of the mother (Wulff, 1945). Bulimics hate their mothers who they see as weak, ineffectual and possessing power only over their children. As if to compensate for this sense of impotence in other areas of their life, the mothers are further seen as suffocating, dominating, and
manipulative in regard to their children. The bulimics are seen as "good" girls who are afraid of parental disapproval and rejection due to their possible sexual activity (Boskind-Lodahl, 1976). In their lives, food is one of the few elements in which these patients can excessively indulge. The binge eating is this person's release from the struggle to meet unrealistic goals (Boskind-Lodahl, 1976). In binge eating, there is a union between body and mind; the patient gives herself to the food. There is a complete loss of ego control and the person enjoys a complete here-and-now type of ecstasy (Boskind-Lodahl, 1976).

Neo-Freudian object relations theorists see the development of bulimia as a reflection of a failure to develop transitional objects (Sugarman & Kurash, 1981). According to these authors, the infant naturally uses its own body as the first transitional object due to its representation of the self and its tactile and sensory features of an object. Normally, in the second stage of development, the infants move to transitional objects separate from themselves, such as blankets, etc. Those who become bulimic, however, never proceed beyond this initial stage. Due to either neglect or overinvolvement by the parents, the child has difficulty establishing identity and early independence from the mother (Sugarman & Kurash, 1981). During adolescence, when strivings for identity and autonomy re-emerge, the child cannot establish independence
and subsequently reverts to her early synthesis of mother within her own body (Sugarman & Kurash, 1981). "It is likely that the acts of eating in childhood and later gorging (adolescence) become the need-gratifying activities that allow the bulimic to develop a sensorimotor representation of the mother. Food is not the issue; rather it is the bodily act of eating which is essential in regaining a fleeting experience of mother" (Sugarman & Kurash, 1981, p. 60). Purging occurs because the image of mother evoked by the binge threatens to submerge the child's tentative sense of self and this act of vomiting frees her from the presence of the mother (Sugarman & Kurash, 1981).

Another dynamic view, postulated by Bruch (1982), also focused on child-parent interactions. She cites that children learn to distinguish one feeling from another by gauging parent reactions to their demands or cries. If parents consistently misinterpret the child's needs, the child herself will not be able to judge these needs accurately. Parents who offer food as solace for emotional pain relate to the child that feelings of hunger accompany feelings of pain (Bruch, 1982). Subsequently, when the child is older, she "will not be able to distinguish between being hungry or sated, or between nutritional need and some other discomfort or tension" (p. 93). The stage is then set for future binge eating during periods of emotional turmoil.
Boskind-Lodahl (1976) takes a somewhat different approach. Her historical-sociocultural perspective, while acknowledging psychodynamic forces, draws heavily on cultural norms and expectations. She sees bulimic women as totally devoted to the idea that wifehood, motherhood and intimacy with men are components of femininity. The patient is used to doing things to please others. There is very little sense of "self" and the patient depends on others (men) to validate her sense of worth. "These women have devoted their lives to fulfilling the feminine role rather than the individual person" (p. 347). Following a binge eating episode, the patient experiences much shame and guilt for the behavior. According to Boskind-Lodahl (1976), social and cultural pressures initiate the purification rite of purging. This purging has symbolic meaning for both the past and the future. Boskind-Lodahl (1976) states:

In reliving the past the self is seen as the helpless child, rewarded for beauty and feminine passivity and punished for being assertive and rebellious. In anticipating the future, the self preoccupies itself with the repercussions of having a fat body in American culture, which will bring about male rejection. For the bulimic, ego manifests itself in social symbols (i.e., beautiful body = male approval = self-validation. (p. 352)

Therefore, in the act of purging, the mind separates itself from the body by focusing on the shame of being out of control, thus preventing ego dissolution and social humiliation.

Behaviorists do not spend much time discussing etiology
and instead focus on treatment. Binge eating is seen as a result of a breakdown in self-regulatory control due to an obsessive drive for thinness, which is initially sought through dieting (Agras & Kirkley, 1986). According to these authors, "This pattern of restrained eating may result in a state of real or perceived deprivation that inevitably leads to a breakdown in restraint and often overeating" (p. 367-368). Binge eating is viewed as the "paradoxical result of a thin ideal and excessive dietary restraint" (Agras & Kirkley, 1986, p. 368). In a study by Rosen and Leitenberg (1982), it was suggested that binge eating and subsequent "purging" or self-induced vomiting are linked by anxiety. The behavior of binge eating itself elicits strong anxiety in the patient due to the overwhelming fear that the episode will lead to a weight gain. Vomiting, and thus removing the food, reduces this anxiety. Using a simple paradigm, the individual soon learns that vomiting leads to anxiety reduction. They theorized that vomiting, not binge eating, was the "driving force" in bulimia. They also proposed that the binge eating might not occur if the individual was prevented from vomiting afterward. This view is important in behavior therapy techniques such as response prevention, a major technique in the treatment plan (Schlesier-Stropp, 1984).

In summary, classic psychodynamic theory on the development of bulimia postulates that instead of fearing
pregnancy the patient desires pregnancy and total femininity (Lindner, 1955). Object relations theory cites problems in identity and autonomy as the precipitating event. Psychodynamic sociocultural perspectives suggest forces generated by cultural norms as the cause; instead of rejecting the feminine role the patient is totally devoted to the idea that wifehood, motherhood and intimacy with men are components of femininity. Behavioral conceptions describe etiology as a result of a drive for thinness that leads to excessive dieting which eventually leads to a binge. Though not overtly stated by each theory, a common underlying premise of each is the identification of the patient with a traditional feminine sex role and a modification of eating behavior to meet the goal of being attractive to men. Although one might argue that the behavioral perspective never makes this statement, it does postulate a drive for thinness, and one can infer that this drive is designed to make the female thinner and more attractive to males by today's standards. It would thus be expected that the sexual attitudes and behaviors of this group would be much different from those of "normals."

There has been little research in this specific area. In related research, Malone (1982) examined the sexual knowledge, attitudes and fears of 121 female bulimarexics and found no significant differences among bulimarexics, non-eating disorder patients and non-patient clinical
psychology students on any of these measures. However, the use of clinical psychology students as a control group raises questions about the generality of these findings. In other related research, Rost, Neuhaus and Florin (1982) have investigated the sex role attitude, sex role behavior and sex role related locus of control in bulimarexic women. Their findings report:

There is a marked discrepancy between the bulimarexic women's general attitude towards the social role of females and their actual sex role related behavior. In contrast to a rather liberated attitude, the bulimarexic woman in her behavior tends to adapt to the demands of her partner and to follow a role concept of passivity, dependency and unassertiveness. (p. 407)

Considering the prevalence of bulimia, it is surprising to find only a limited number of studies attempting to empirically test the validity of the major theories describing etiology. In keeping with the psychodynamic historical-sociocultural theories described above, on the etiology of bulimia nervosa, this research examined the sexual role identification, drive for thinness, body dissatisfaction and interoceptive awareness (ability to accurately identify emotions and visceral sensations) of bulimics and controls. According to dynamic theory as proposed by Lindner (1955), Wulff (1945) and Boskind-Lodahl (1976) bulimia is the total acceptance of and identification with femininity. If this is correct, it would be expected that bulimics would identify more strongly with a traditional feminine sex role than controls. Also, if it is
inferred that total acceptance of femininity includes making oneself attractive to men (thin by current standards), bulimics would have a higher drive for thinness and body dissatisfaction than normals. In keeping with a more object relations theoretical orientation, Bruch (1981) postulates that the bulimic is unable to differentiate emotional and visceral states. If this postulate is correct, it is expected that bulimics would have less confidence in recognizing and identifying these feelings and sensations compared to controls.
STATEMENT OF THE PROBLEM

The present research compared bulimics and "normals" in terms of their sex role identification, drive for thinness, body shape dissatisfaction and interoceptive awareness. For the research, the following hypotheses were made: First, using the Bem Sex Role Inventory (BSRI), bulimics would identify more strongly with the traditional female role and hence achieve a more "feminine" rating than controls; second, on the Eating Disorder Inventory (EDI), bulimics would demonstrate a higher drive for thinness and dissatisfaction with their bodies than controls; third, on the EDI, bulimics would show poorer interoceptive awareness than controls.
METHOD

Subjects

Two groups of subjects were used in this research. The bulimic group consisted of 18 females who met the DSM-III criteria for a diagnosis of bulimia nervosa. These subjects were obtained from mental health practitioners, who were advised of DSM-III criteria. The final classification of subjects for the bulimia group was based on responses to the Eating Problems Questionnaire (Stuckey, Lewis, Jacobs, Johnson, & Schwartz, 1981). Subjects obtained were approximately equally divided between two sources: the University of Central Florida Counseling and Testing Center and Orlando Regional Medical Center, Department of Mental Health (ORMC). The University of Central Florida is a state university which serves the Orlando metropolitan area. ORMC is an urban community health center serving Orlando and surrounding communities. The control group consisted of 18 female undergraduate students from psychology courses at the University of Central Florida who volunteered for the research.

Demographic results concerning the bulimic and control groups indicate similarity between the groups on major demographic variables. There were no significant differences between the bulimic and control groups in terms of age (22.5, 21.2) or education (15.4, 15.5), and all subjects were caucasians. It was necessary for this
research that the control group be "eating disorder free" (i.e., neither anorexic, bulimic or obese). It is interesting to note that of the original 21 subjects of the control group, 3 or 16% were removed due to an eating history that would have made them eligible for inclusion in the bulimic group. This incidence rate is similar to that suggested by Mitchell and Pyle (1985) (14%) in college populations.

Materials

Objective and standardized tests were used to compare bulimics and controls in terms of sex role identification, drive for thinness, body dissatisfaction and interoceptive awareness.

The Bem Sex-Role Inventory (BSRI; Bem, 1974) was used to measure sex role identification within the groups (see Appendix A). The scale consists of 60 personality traits or behaviors equally divided between Masculine, Feminine, and Neutral items. In the development of the inventory items, the author and several students compiled a list of 200 personality characteristics that seemed to them to be "both positive in value and either masculine or feminine in tone" (Bem, 1974, p. 156). Neutral items were created by having these same people generate items that were no more desirable for one sex than for another but that had agreed upon social
desirability connotations. Judges were then used to select 20 masculine, 20 feminine and 20 neutral items that best typified each particular construct.

The person taking the test is asked to rate how each characteristic applies to them by rating each item from 1 ("Never or almost never true") to 7 ("Always or almost always true"). On the basis of the responses, the person receives a Masculinity score, a Femininity score, an Androgyny score and a Social Desirability score. The Masculinity score equals the mean self-rating for all endorsed masculine items, and the Femininity score equals the mean self-rating for all endorsed feminine items. The Androgyny score is the "Student's t-ratio for the difference between a person's masculine and feminine self-endorsement" (Bem, 1974, p. 158).

Subsequent research with the BSRI has revealed a potential problem with the definition of psychological androgyny (e.g., Heilbrun, 1976; Strahan, 1975; Spence et al., 1975). The original definition for androgyny was an equal endorsement of masculine and feminine characteristics by a person. These authors cited that this definition did not differentiate between those who scored high in both masculinity and femininity and those who scored low in masculinity and femininity. Bem (1977) administered the BSRI to 375 college males and 290 females. After the data were scored, the subjects were categorized both on the basis
of the t-ratio and the median split methods (Spence et al., 1975). Her results indicated that the two classification systems did not differ significantly in the ways they defined either masculinity or femininity. However, there was a difference in the way the two systems defined androgyny. Of the subjects who were classified as androgynous by the median split method, half of the men and a quarter of the women failed to be classified as androgynous by the t-ratio. Twenty-seven percent of the men and 20% of the women were classified as undifferentiated by the median split method. Of these subjects, half the men and two-thirds of the women were classified as androgynous by the t-ratio method. Based on these results, Bem (1977) recommended

the term androgynous ought to be reserved for those individuals who score high in both masculinity and femininity, and that the BSRI ought therefore to be scored so as to yield four distinct groups of masculine, feminine, androgynous, and undifferentiated subjects. (p. 204)

Test-retest reliability was also calculated for the BSRI (Bem, 1974). It was administered for a second time to 28 males and 28 females from the Stanford University sample approximately four weeks after the first administration. Product-moment correlations of each scale over a 4-week period were Masculinity _r_ = .90, Femininity _r_ = .90,
Androgyny $r = .93$, and Social Desirability $r = .89$.

Drive for thinness, body dissatisfaction, locus of control and interoceptive awareness were measured by the Eating Disorder Inventory (EDI) developed by Garner, Olmstead and Polivy (1983). The test was developed from 146 items that were generated by clinicians who were both familiar with research literature on anorexia nervosa and had clinical experience treating these patients (Garner et al., 1983). The items were originally designed to measure 11 separate constructs. However, only 8 of these 11 constructs met the reliability and validity requirements of the authors (Garner et al., 1983). The 8 constructs used in the final version of the test were: drive for thinness, bulimia, body dissatisfaction, ineffectiveness, perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears (see Appendix B).

Two groups participated in the validation of the EDI. The first group, or anorexia group, consisted of 129 females who met a modified version of the Feighner et al. (1972) diagnostic criteria for anorexia nervosa (Garner & Garfinkel, 1982). Of this group, 56 were of the "restricter" type while the remaining 73 also had the complication of "bulimia." The second group, or female comparison group, consisted of 770 female university students from first- and second-year psychology courses. These subjects were used to select items from the original
pool for inclusion in the EDI. To be retained, items had to meet two statistical criteria. First, they were required to significantly differentiate between the anorexic group (AN) and the female comparison group (FC). Secondly, items were required to correlate higher with items of their intended subscale than to any other subscale (Garner et al., 1983).

Criterion validity was established by comparing the subjects' EDI profiles with the judgments of experienced clinicians familiar with the patients' psychological presentation. One psychologist and one psychiatrist served as raters and were instructed to "rate the relevancy of each of these traits or characteristics for this patient compared to other patients you have treated" (Garner et al., 1983, p. 6). This method of establishing validity and reliability has been described by Folstein and Luria (1973). The raters were given a description of subscale content and each patient's total score percentile rank within the anorexic sample. The correlation between the raters' evaluations and EDI profiles were as follows: drive for thinness \( r = .53 \); bulimia \( r = .57 \); body dissatisfaction \( r = .44 \); ineffectiveness \( r = .68 \); perfectionism \( r = .47 \); interpersonal distrust \( r = .56 \); interoceptive awareness \( r = .51 \); and maturity fears \( r = .43 \). All correlations were significant at the .001 level with a Bonferroni-type adjustment and eight individual comparisons (Garner et al., 1983).
The present form of the EDI and the form used in this research consists of 64 six-point, forced choice items. The subjects read each item and then decide if the item applies to them "always," "usually," "often," "sometimes," "rarely," or "never." Each response answered in a deviant direction is then assigned a score ranging from one to three depending on which of the above responses the subject chooses. Total scores are then recorded for each subscale. The scores are subsequently plotted on a profile sheet which has preprinted norms for AN and FC groups. Omissions on the test are very important. It is recommended that if more than one item is omitted from a subscale, that subscale score should not be computed (Garner et al., 1983).

The Drive-for-Thinness scale of the EDI consists of 7 items intended to measure excessive concern with dieting, preoccupation with weight and entrenchment in an extreme pursuit of thinness (Garner & Olmstead, 1983). This scale demonstrates content validity through such questions as "I think about dieting" and "I am preoccupied with the desire to be thinner."

The Body Dissatisfaction scale consists of 9 items designed to reflect the belief that specific parts of the body associated with shape change or increased fatness at puberty are too large (e.g., hips, thigh, buttocks). It includes statements such as "I think that my hips are too big" and "I think that my thighs are too large."
The Interoceptive Awareness scale consists of 10 items reflecting one's "lack of confidence in recognizing and accurately identifying emotions or visceral sensations of hunger or satiety" (Garner & Olmstead, 1983, p. 5). Content validity is assessed through the use of such items as "I get confused about what emotion I am feeling" and "I get confused as to whether or not I am hungry."

The final instrument used in this research was the Eating Problems Questionnaire (EPQ) developed by Stuckey, Lewis, Jacobs, Johnson, and Schwartz (1981). The questionnaire focuses on six areas of eating problems including bulimia, purging, anorexia nervosa, habits and miscellaneous behaviors, medical and treatment information, and psychological aspects (see Appendix C). The questionnaire contains multiple choice and fill-in-the-blank questions. The primary purpose of this questionnaire was to aid in the assignment of subjects to the groups. Through this questionnaire, it was possible to obtain information concerning the subject's eating habits in such areas as number of binges per week, caloric intake, duration of binge, use of purging, and previous treatment. Though it was hoped that the subject pools would be homogeneous (that is, all subjects referred by therapists would be bulimic and all psychology students would be non-bulimic) analysis of the Eating Problems Questionnaire revealed this not to be so. As reported above, three psychology students were
assigned to the bulimic group based upon their responses to this instrument. Therefore, final classification of subjects to the groups was based on their responses to the EPQ. Any subject who revealed a history of binge eating on this questionnaire was assigned to the bulimic group regardless of the referral source.

**Procedure**

Subjects were administered the above tests in two ways, dependent upon the group to which they belonged. Those in the bulimic group were given a packet containing instructions and all the necessary materials by their therapist. They were asked to take these materials home and complete and return them by the next session. Packet instructions were quite explicit, but subjects with questions were directed to their therapist who had knowledge of the tests. Control subjects were given the same packet as above by their psychology instructor and asked to return them as soon as possible. The total time required for a subject to complete the materials was less than two hours.
RESULTS

Demographic results concerning the bulimic and control groups indicate similarity between the groups on major variables. There were no significant differences between bulimic and control groups in terms of years of age (M=22.5, M=21.2), marital status (15 single, 2 married, 1 divorced; 18 single) or years of education (M=15.4, M=15.5). All subjects in both groups were either college graduates, or in college with the exception of one subject in the bulimic group who did not indicate her education level. All subjects were caucasian. For the bulimic group, the average number of binges a month was 10.03 with a range of 1 to 30 times a month. In terms of caloric intake, the average binge was 5066 calories with a range of 500 to 35,000 calories.

Results on the difference between bulimics and controls in terms of endorsement of adjectives describing "masculine" or "feminine" sex role identification appear to vary depending on what scoring system is utilized. As indicated earlier, there have been several different suggestions for accurately scoring the BSRI (Spence et al., 1975; Strahan, 1975). On her reexamination of the issue, Bem (1977) recommended the median split method proposed by Spence et al. (1975). Using this method, 33% of the bulimic group is identified as masculine, 39% as feminine, 11% as androgynous.
and 17% as undifferentiated; in the control group, 22% of the subjects were classified as masculine, 17% as feminine, 50% as androgynous and 11% as undifferentiated. Comparisons of the frequency of sex role classification in terms of feminine versus non-feminine between the two groups using chi square ($\chi^2$) indicates that the distributions are not significantly different [$\chi^2(3)=2.22, p=.14$] (See Appendix D). However, if groups are compared in terms of their general endorsement of masculine or feminine items, the differences become less apparent. Such a method would be less concerned with the person's classification as masculine, feminine or androgynous and more concerned with the overall endorsement of "femininity" by each group. Using this method, which compared the average masculinity and femininity score of each group, reveals little difference between groups in terms of sex role identification. The mean masculinity scores of the bulimic and control groups were 4.37 and 4.68, respectively, while the mean femininity scores were 5.16 and 5.34. Comparison of these means using $t$-tests indicates no significant difference between groups on either the masculine [$t(18)=1.54, p=.13$] or feminine [$t(18)=.96, p=.35$] dimensions.

Results also indicate significant results on the Eating Disorder Inventory between the bulimic and control groups. A multiple analysis of variance (MANOVA); using Drive for Thinness, Body Dissatisfaction and Interoceptive Awareness
as dependent variables, revealed significance among these factors using Wilks Lambda \( \lambda = .290, F (3,33) = 26.94, p < .0001 \). Noting that there is significant difference between groups on the EDI, it is then possible to examine the individual scales of the instrument. Analysis of the EDI Drive for Thinness scale indicates that bulimics have a much higher drive for thinness than controls. The mean score for the bulimic group was 13.50 while the control mean score was 3.50. Using \( t \)-tests, this difference was determined to be quite significant \( t (17) = 10.00, p < .001 \) (See Appendix E).

There is also a difference between bulimics and controls in terms of body dissatisfaction. The mean score of the bulimic group on the Body Dissatisfaction scale was 15.94 while the control group mean was 9.28. This difference was significant \( t (17) = 2.53, p = .016 \).

Results also indicate a significant difference between bulimics and controls in terms of Interoceptive Awareness (one's ability to identify emotions of visceral sensations or hunger or satiety). The mean score of the bulimic group on the Interoceptive Awareness scale of the EDI was 11.00 while the mean score of the control group was 1.72. This difference was found to be significant \( t (17) = 4.73, p < .001 \).
DISCUSSION

Current results indicate somewhat paradoxical findings in terms of the sex role identification of bulimics and controls. Central to the psychodynamic theories is the postulate that bulimics are seeking total acceptance of the traditional feminine role. According to Bosking-Lodahl (1976), these women are totally devoted to the idea that wifehood, motherhood and intimacy with men are components of femininity. This general and basic tenent of dynamic theory does not appear to be supported by the present data. Although more than twice the number of bulimics (39% to 17%) are classified as feminine as compared to controls, this analysis can be misleading. The bulimic group also has more subjects classified as masculine (33% to 22%) compared to controls. The finding that 50% of control subjects were classified as androgynous (compared to 11% of the bulimic group) suggests that perhaps controls are much more flexible in terms of sex role identification while bulimics are much more polarized. The comparison of the overall mean masculinity and femininity score indicates no significant difference between groups. Perhaps this is the most useful statistic concerning sex role identification since it does not take into account the difference between masculine and feminine endorsement but only the endorsement of traditionally feminine items. Although the present data
suggest little support for the idea that bulimics, in
general, are more closely identified with traditional
feminine sex roles, further analysis reveals several
plausible alternative explanations consistent with dynamic
theory. An alternative explanation can be considered at
both a methodological and conceptual level. The
instructions of the BSRI ask the subject to "describe
yourself" using the provided descriptors. While another
person's rating of the bulimic subject might classify her in
a traditional feminine way (i.e., affectionate, yielding,
etc.), the bulimic herself may not. Though affectionate and
caring as observed by others, the bulimic may not see
herself as affectionate or caring enough and hence her score
would be inaccurate. This would explain the discrepancy
between the theories that describe behaviors consistent with
traditionally feminine sex role identification and the
present data. The second, more conceptual issue, is that
all dynamic theorists speak of a "desire" for complete
femininity. Whether this is actually achieved is debatable,
and the fact that the bulimic engages in this abnormal
eating pattern suggests that attempts at achieving this goal
have failed. A final interpretation of these data may
provide insight regarding the utility of bulimia as a
discrete homogeneous diagnostic entity. Bulimia, as
conceptualized by DSM-III, bears considerable similarity to
Boskind-Lodahl's (1976) bulimarexia, in that it is comprised
of both binge eating and purging. Fairburn and Cooper (1982) have conceptualized bulimia as a variant of anorexia nervosa while Bruch (1986) describes terms such as bulimarexia as "semantic atrocity" (p. 12). Whether the disorders are similar or polar opposites is an important issue in terms of dynamic conceptualizations. Psychodynamic theories in regard to sex role identification in these eating disorders are quite dependent on the disorder involved. Where bulimia is conceptualized as a total acceptance of the feminine model (Boskind-Lodahl, 1976), anorexia is seen as a defense against oral impregnation and a complete rejection of the feminine role (Szyrynski, 1973). Examination of the present data suggests that bulimia may, in fact, be a heterogenous disorder similar to that of depression in which several conceptually different theories purport that multiple factors may independently lead to depression. In the present study, the finding that 89% of the bulimics were approximately evenly distributed as polar opposites in terms of sex role identification (compared to 39% of controls) suggests that there may in fact be two types of bulimics, those in whom it is a variant of anorexia nervosa and those in whom it is a distinct clinical entity.

The present data, consistent with expectations, delineated significant differences between bulimics and controls on all the EDI scales utilized in this research. Both bulimics and control subjects expressed dissatisfaction
over the shape and size of their bodies. The mean score for the bulimic and control groups on the Body Dissatisfaction subscale of the EDI was 15.94 and 9.28, respectively. While the mean for the control group may seem high, it should be pointed out that the subjects' scores were quite similar to those used by Garner et al. (1983) in the norming of the EDI (9.7). The difference between the bulimic and control means, while significant, is not as great as the difference between the groups in terms of drive for thinness (13.50 and 3.50, respectively). Therefore, while both groups report some body dissatisfaction, bulimics possess a much higher drive for thinness which may lead them to engage in aberrant eating behavior. This finding lends some support to the general dynamic theories which see bulimia as a result of intrapsychic factors rather than only a method of achieving desired body shape, a view held by behavioral theorists (Agras & Kirkley, 1986). For while subjects in both groups reported body dissatisfaction, only the bulimic group engaged in this binge/purge cycle. The present data suggest that body dissatisfaction is perhaps necessary, but not sufficient to lead to the development of bulimia.

However, while the above data illustrate that bulimics have a greater drive for thinness than controls, it does not provide answers to the possible source of this drive. Most theorists would agree that bulimics have a greater drive for thinness than controls, the differences emerge when one
discusses the hypothesized source of these differences. While more behavioral theorists would argue that eating behavior is simply a desire for a slimmer body, dynamic positions generally hypothesize that the eating behavior is a symptom of an underlying conflict. The present data lend some support to at least one of the dynamic theories.

Thus, Bruch (1982) theorized that the development of bulimia may be due to early parental inconsistency. Bruch (1982) argues that these children are not "able to distinguish between being hungry or sated, or between nutritional need and some other discomfort or tension" (p. 347). Consistent with expectations, bulimics achieved a significantly higher mean score on interoceptive awareness (poorer awareness) than controls (11.00 and 1.72, respectively). Thus, when under periods of stress and tension, the bulimic is unable to distinguish this emotional tension from physical tension (hunger) and subsequently binges. This pattern, according to Bruch (1982), was established early in the child's life by parents who offered food as solace for emotional pain. This theory is also supported from data from the Eating Problem Questionnaire (1981). When asked to describe feelings and emotions during a binge, 56% of the bulimics reported feeling panicked, 50% spaced-out, and 56% helpless, thus indicating a period of significant emotional turmoil prior to binging in the bulimic.
In conclusion, the present research examined the bulimic from a psychodynamic socio-cultural perspective in an attempt to empirically examine the assumptions of the theory. In general, some support was found. However, it was also demonstrated that empirically examining many of the issues raised by the theory requires a methodology more sophisticated than the present research. For example, on one level it appears that the BSRI is an appropriate instrument to test the postulate that bulimics identify more strongly with a traditional feminine sex role orientation than normals. However, this instrument is a self-report inventory. The bulimic's actual sex role identification and behavior may or may not be related to their self-report. Compared to the norm, bulimics may be very traditionally feminine. However, in terms of their own idiosyncratic views of themselves, they may see themselves as not feminine enough. The finding that bulimics lack an ability to recognize or identify emotions or visceral sensations when compared to normals lends support to the dynamic theory that bulimia reflects deficits in early parental relationships. Finally, the data suggest that bulimia is not simply a technique used by young women dissatisfied with their current body shape, but it is a complex coping behavior.

The incidence of bulimia nervosa is becoming increasingly common among college women. It is an area that demands careful controlled research that has been heretofore
absent. Methodological problems such as concise and clear diagnostic criteria are major stumbling blocks in this area that must be addressed. Is a person who binges and purges daily more of a "bulimic" than one who engages in this cycle once a month? Are the dynamics the same for both groups, or are they different? Obtaining answers to these questions will be difficult and will require large numbers of subjects.
APPENDIX A

BEM SEX ROLE INVENTORY
BEM SEX ROLE INVENTORY
(Please Print)
Sex: __________ Age: __________ Occupation: ________________________

On the following page, you will be shown a large number of personality characteristics. We would like you to use those characteristics in order to describe yourself. That is, we would like you to indicate on a scale from 1 to 7, how true of you these various characteristics are. Please do not leave any characteristic unmarked.

Example: sly
Mark a 1 if it is NEVER OR ALMOST NEVER TRUE that you are sly.
Mark a 2 if it is USUALLY NOT TRUE that you are sly.
Mark a 3 if it is SOMETIMES BUT INFREQUENTLY TRUE that you are sly.
Mark a 4 if it is OCCASIONALLY TRUE that you are sly.
Mark a 5 if it is OFTEN TRUE that you are sly.
Mark a 6 if it is USUALLY TRUE that you are sly.
Mark a 7 if it is ALWAYS OR ALMOST ALWAYS TRUE that you are sly.

Thus, if you feel it is sometimes but infrequently true that you are "sly", never or almost never true that you are "malicious", always or almost always true that you are "irresponsible", and often true that you are "carefree", then you would rate these characteristics as follows:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sly</td>
<td>3</td>
</tr>
<tr>
<td>Malicious</td>
<td>1</td>
</tr>
<tr>
<td>Irresponsible</td>
<td>7</td>
</tr>
<tr>
<td>Carefree</td>
<td>5</td>
</tr>
</tbody>
</table>

(PLEASE COMPLETE OTHER SIDE!)
### DESCRIBE YOURSELF

<table>
<thead>
<tr>
<th>Self reliant</th>
<th>Reliable</th>
<th>Warm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yielding</td>
<td>Analytical</td>
<td>Solemn</td>
</tr>
<tr>
<td>Helpful</td>
<td>Sympathetic</td>
<td>Willing to take a stand</td>
</tr>
<tr>
<td>Defends own beliefs</td>
<td>Jealous</td>
<td>Tender</td>
</tr>
<tr>
<td>Cheerful</td>
<td>Has leadership abilities</td>
<td>Friendly</td>
</tr>
<tr>
<td>Moody</td>
<td>Sensitive to the needs of others</td>
<td>Aggressive</td>
</tr>
<tr>
<td>Independent</td>
<td>Truthful</td>
<td>Guileless</td>
</tr>
<tr>
<td>Shy</td>
<td>Willing to take risks</td>
<td>Inefficient</td>
</tr>
<tr>
<td>Compassionate</td>
<td>Understanding</td>
<td>Acts as a leader</td>
</tr>
<tr>
<td>Athletic</td>
<td>Secretive</td>
<td>Childlike</td>
</tr>
<tr>
<td>Affectionate</td>
<td>Makes decisions easily</td>
<td>Adaptable</td>
</tr>
<tr>
<td>Theatrical</td>
<td>Compliant</td>
<td>Individualistic</td>
</tr>
<tr>
<td>Assertive</td>
<td>Sincere</td>
<td>Does not use harsh language</td>
</tr>
<tr>
<td>Plottable</td>
<td>Self-sufficient</td>
<td>Unsystematic</td>
</tr>
<tr>
<td>Happy</td>
<td>Eager to soothe hurt feelings</td>
<td>Competitive</td>
</tr>
<tr>
<td>Strong personality</td>
<td>Conceited</td>
<td>Loves children</td>
</tr>
<tr>
<td>Loyal</td>
<td>Dominant</td>
<td>Tactful</td>
</tr>
<tr>
<td>Unpredictable</td>
<td>Soft spoken</td>
<td>Ambitious</td>
</tr>
<tr>
<td>Forceful</td>
<td>Likeable</td>
<td>Gentle</td>
</tr>
<tr>
<td>Feminine</td>
<td>Masculine</td>
<td>Conventional</td>
</tr>
</tbody>
</table>
APPENDIX B

EATING DISORDER INVENTORY
Name ___________________________ Date ____________________
Age ___________________ Sex ___________________ Marital status ___________
Present weight ___________________ Height ___________________
Highest past weight (excluding pregnancy) ___________________ (lbs)
   How long ago? ___________________ (months)
   How long did you weigh this weight? ___________________ (months)
Lowest past adult weight ___________________ (lbs)
   How long ago? ___________________ (months)
   How long did you weigh this weight? ___________________ (months)
What do you consider your ideal weight? ___________________ (lbs)
Age at which weight problems began (if any) ___________________
Present occupation ________________________________________
Father's occupation ___________________ Mother's occupation ___________________
INSTRUCTIONS

This is a scale which measures a variety of attitudes, feelings and behaviors. Some of the items relate to food and eating. Others ask you about your feelings about yourself. THERE ARE NO RIGHT OR WRONG ANSWERS SO TRY VERY HARD TO BE COMPLETELY HONEST IN YOUR ANSWERS. RESULTS ARE COMPLETELY CONFIDENTIAL. Read each question and fill in the circle under the column which applies best to you. Please answer each question very carefully. Thank you.

<table>
<thead>
<tr>
<th></th>
<th>O</th>
<th>O</th>
<th>O</th>
<th>O</th>
<th>O</th>
<th>O</th>
<th>O</th>
<th>O</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I eat sweets and carbohydrates without feeling nervous.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I think that my stomach is too big.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I wish that I could return to the security of childhood.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I eat when I am upset.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I stuff myself with food.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I wish that I could be younger.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I think about dieting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I get frightened when my feelings are too strong.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I think that my thighs are too large.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I feel ineffective as a person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I feel extremely guilty after overeating.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I think that my stomach is just the right size.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Only outstanding performance is good enough in my family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. The happiest time in life is when you are a child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I am open about my feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I am terrified of gaining weight.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I trust others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I feel alone in the world.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I feel satisfied with the shape of my body.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I feel generally in control of things in my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. I get confused about what emotion I am feeling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I would rather be an adult than a child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I can communicate with others easily.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. I wish I were someone else.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. I exaggerate or magnify the importance of weight.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. I can clearly identify what emotion I am feeling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. I feel inadequate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I have gone on eating binges where I have felt that I could not stop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. As a child, I tried very hard to avoid disappointing my parents and teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I have close relationships.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
31. I like the shape of my buttocks.
32. I am preoccupied with the desire to be thinner.
33. I don’t know what’s going on inside me.
34. I have trouble expressing my emotions to others.
35. The demands of adulthood are too great.
36. I hate being less than best at things.
37. I feel secure about myself.
38. I think about bingeing (over-eating).
39. I feel happy that I am not a child anymore.
40. I get confused as to whether or not I am hungry.
41. I have a low opinion of myself.
42. I feel that I can achieve my standards.
43. My parents have expected excellence of me.
44. I worry that my feelings will get out of control.
45. I think that my hips are too big.
46. I eat moderately in front of others and stuff myself when they're gone.
47. I feel blinding after eating a normal meal.
48. I feel that people are happiest when they are children.
49. I gain a pound, I worry that I will keep gaining.
50. I feel that I am a worthwhile person.
51. When I am upset, I don’t know if I am sad, frightened, or angry.
52. I feel that I must do things perfectly, or not do them at all.
53. I have the thought of trying to vomit in order to lose weight.
54. I need to keep people at a certain distance (feel uncomfortable if someone tries to get too close).
55. I think that my thighs are just the right size.
56. I feel empty inside (emotionally).
57. I can talk about personal thoughts or feelings.
58. The best years of your life are when you become an adult.
59. I think that my buttocks are too large.
60. I have feelings that I can’t quite identify.
61. I eat or drink in secrecy.
62. I think that my hips are just the right size.
63. I have extremely high goals.
64. When I am upset, I worry that I will start eating.
APPENDIX C

EATING PROBLEMS QUESTIONNAIRE
## EATING PROBLEMS QUESTIONNAIRE

**INSTRUCTIONS:** This questionnaire covers several eating problems that may or may not apply to you. You may find it difficult to answer some questions if your eating pattern is irregular or has changed recently. Please read each question carefully and choose the answer that best describes your situation most of the time. Also, please feel free to write remarks in the margins if this will clarify your answer. Thank you.

Date _______________ ID# ________________

### A. BULIMIA (Binge Eating)

1. Do you have a problem with binge eating? [ ] Yes, now [ ] Used to [ ] No

2. When was the last time you had a binge? Specify number: ____ months, ____ weeks, or ____ days ago

3. Please describe your binges:

   - Eat a large amount of food [ ] Always [ ] Often [ ] Sometimes [ ] Rarely
   - Eat very rapidly [ ] Always [ ] Often [ ] Sometimes [ ] Rarely
   - Feel I can’t stop or control eating [ ] Always [ ] Often [ ] Sometimes [ ] Rarely

4. How often do you binge? [ ] More than once a day [ ] Daily [ ] At least once a week [ ] A few times a month [ ] Once a month or less

5. How long does the binge last? [ ] Less than 1 hour [ ] 1-2 hours [ ] More than 2 hours

6. What foods do you eat when you’re bingeing? When you’re not bingeing?

   **Check all that apply:**

   - Binge Foods
     - Bread/cereal/pasta
     - Cheese/milk/yogurt
     - Fruit
     - Meat/fish/poultry/eggs
     - Salty snack foods
     - Sweets
     - Vegetables

   - Non-binge Foods

7. About how many calories do you consume in a typical binge? _____ calories

8. About how much would you estimate you spend on binge eating? _____ per binge

9. How old were you when you first started bingeing? _____ years old

10. How long have you had a problem with binge eating? Specify number: _____ years, _____ months, or _____ weeks

11. What event or feeling triggers a binge? (explain) ________________________________________________________________

12. What best describes how you feel during a binge? Check all that apply:

   - Calm
   - Helpless
   - Stimulated
   - Excited
   - Angry
   - Spaced-out
   - Disgusted
   - Energized
   - Secure
   - Panicked
   - Relieved
   - Guilty

13. How do you usually feel after a binge? (before purging)? Check all that apply:

   - Calm
   - Helpless
   - Stimulated
   - Excited
   - Angry
   - Spaced-out
   - Disgusted
   - Energized
   - Secure
   - Panicked
   - Relieved
   - Guilty

---

**Note:** This questionnaire is part of a study on eating disorders and may be cited in academic research. Please feel free to provide additional information or remarks in the margins.
14. What time of the day are you most likely to binge?  
   - Mornings (7 am - 12 Noon)  
   - Afternoon (12 Noon - 4 pm)  
   - Evenings (4 pm - 10 pm)  
   - Nights (after 10 pm)  

15. Why do you think you started binge eating in the first place?  

B. PURGING

1. Have you ever induced yourself to vomit, or have you ever thrown up after a binge?  
   - Yes  
   - No

2. If not, have you ever been tempted to do this?  
   - Yes, very much so  
   - No

3. If yes, when was the last time you induced vomiting?  
   Specify number: ___________ months, ___________ weeks, or ___________ days ago

4. How often do you induce vomiting?  
   - More than once a day  
   - At least once a week  
   - Once a month or less

5. How old were you when you induced vomiting for the first time?  
   _______ years old

6. How long have you been vomiting in this way?  
   Specify number: _________ years, _________ months, or _________ weeks

7. How do you usually get yourself to throw up?  

8. Has it become harder or easier to vomit since you first began?  
   - Harder  
   - Easier  
   - About the same

9. Do you remember why you did this originally?  (explain)

10. Have you ever used laxatives to control your weight or "get rid of food"?  
    - Yes, now  
    - Used to  
    - No

11. If not, have you ever been tempted to do this?  
    - Yes, very much so  
    - No

12. If yes, when was the last time you took laxatives for weight control?  
    Specify number: ___________ months, ___________ weeks, or ___________ days ago

13. How often do you take laxatives for this purpose?  
    - More than once a day  
    - At least once a week  
    - Once a month or less

14. How old were you when you first took laxatives for weight control?  
    _______ years old

15. How long have you been doing this?  
    Specify number: _________ years, _________ months, or _________ weeks

16. What dosage do you take?  
    Brand: ___________  
    Amount: ___________

17. Do you remember why you started using laxatives for weight control?  

18. What best describes how you feel after you have purged (by vomiting and/or using laxatives)?  
   Check all that apply:  
   - Calm  
   - Excited  
   - Disgusted  
   - Panicked  
   - Hopeless  
   - Angry  
   - Energized  
   - Relieved  
   - Guilty  
   - Confused  
   - Secure  
   - Guilty  

   (a-e)
C. ANOREXIA NERVOSA

1. Do you consider yourself to have (or to have had) anorexia nervosa?
- Yes
- No

2. Please indicate any of the following symptoms you have had:
- Deliberate weight loss (not due to medical illness)
- Loss of menstrual period
- Overactivity/exercise without enjoyment
- Feeling terrified of fat
- Feeling fat despite others saying you are too thin
- Being obsessed or totally preoccupied with thoughts of food

3. Lowest weight reached? ______ pounds

4. How long ago was this (lowest weight)?
   Specify number: ______ months, ______ weeks, or ______ days ago

D. HABITS & MISCELLANEOUS BEHAVIORS

1. Please indicate your use of alcoholic beverages and other drugs:
   - Alcohol (specify type)
   - Amount
   - Daily
   - Weekly
   - Monthly
   - Less than Monthly

2. Cigarettes:
   - None
   - 0 to ½ pack/day
   - 1 pack/day
   - More than 1 pack/day

3. Exercise:
   - Type
   - Daily
   - Weekly
   - Monthly
   - Less than Monthly

   How much time do you spend exercising each day? Specify time: ______ hours or ______ minutes

4. How old were you when you first had sexual intercourse?
   ______ years old, or
   Haven't yet.

5. How interested are you in sexual activity?
   - Very much
   - Somewhat
   - A little
   - Not at all

6. Please describe any illegal behavior you have engaged in as an adult or teenager (for example, shoplifting, vandalism, etc.):

E. MEDICAL & TREATMENT INFORMATION

1. Have you noticed any changes in your physical health since your eating problem began?
   - Yes
   - No
   If yes, please describe:

2. How often do you worry about possible ill effects of binging and/or purging?
   - Always
   - Often
   - Sometimes
   - Rarely/Never

3. Have you ever taken any psychiatric medication?
   - Yes
   - No

   Type:
   Reason:

4. Are your menstrual periods regular?
   - Yes
   - No
E. 5. If you do not menstruate regularly, please describe your pattern over the past year:

6. When was your last menstrual period? Specify number: _____ months, _____ weeks, or _____ days ago

7. Please indicate any treatment you have sought for your eating problem and how helpful it has been. Check all that apply:

- Group Psychotherapy
- Hypnosis
- Individual Psychotherapy
- Nutrition Counseling
- Overeaters Anonymous
- Self-Help Group
- Weight Watchers
- Other:
- None of the above

F. PSYCHOLOGICAL ASPECTS

1. How much does your eating problem influence the following? (Total, Very Much, Somewhat, Not at all)

   Work
   Daily activities (other than work)
   Thoughts
   Feelings about myself
   Personal relationships

2. How often do you feel depressed?

   - Always
   - Very Often
   - Often
   - Sometimes
   - Rarely/ Never

3. Have you ever injured yourself intentionally? Yes No

   Please describe what happened:

4. Have you ever felt so bad or hopeless that you thought of suicide?

   - No
   - Yes, considered it, but didn't act on the idea.
   - Yes, made a suicidal gesture or plea for help.
   - Yes, made a serious suicide attempt.

   What brought this on?

5. Research indicates that eating problems are more common among women than men. Why do you think this is so?

* Please feel free to make additional comments on a separate sheet of paper.
APPENDIX D

TABLES 1 AND 2
Table 1
Sex Role Classification of Bulimics and Controls Using the BSRI

<table>
<thead>
<tr>
<th>Scale</th>
<th>Bulimic</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Feminine</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Androgynous</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

$\chi^2(3) = 2.22, \ p=.14$

Table 2
Comparison of Bulimics and Controls in Terms of Masculinity and Femininity Scores on the BSRI

<table>
<thead>
<tr>
<th>Scale</th>
<th>Bulimic</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Masculine</td>
<td>4.37 (.73)</td>
<td>4.68 (.49)</td>
</tr>
<tr>
<td>Feminine</td>
<td>5.16 (.68)</td>
<td>5.34 (.44)</td>
</tr>
</tbody>
</table>
APPENDIX E

TABLE 3
### Table 3
Comparison of Bulimics and Controls on the EDI

<table>
<thead>
<tr>
<th>Scale</th>
<th>Bulimic M (SD)</th>
<th>Control M (SD)</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT</td>
<td>13.50 (4.83)</td>
<td>3.50 (3.99)</td>
<td>10.00</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>BD</td>
<td>15.94 (7.90)</td>
<td>9.29 (7.94)</td>
<td>2.53</td>
<td>.016</td>
</tr>
<tr>
<td>IA</td>
<td>11.00 (7.75)</td>
<td>1.72 (2.47)</td>
<td>4.73</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
REFERENCES


