The Eating Disorder Continuum: A Comparison of Depression and Personality Organization in Anorexia Nervosa, Bulimia, and Weight Preoccupation

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The Eating Disorder Continuum:
A Comparison of Depression and Personality Organization in
Anorexia Nervosa, Bulimia, and Weight Preoccupation

by

Elizabeth Anne Pfaelzer-Smith

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
Fulfillment of the Requirements for the Degree of
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September
1985
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VITA

The author, Elizabeth A. Pfaelzer-Smith, is the daughter of Anne I. Goldman and Carter P. Pfaelzer. She was born on March 27, 1957 in Boston, Massachusetts and was raised by Jay Goldman and Anne (Ipsen) Goldman.

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TO MY LOVING HUSBAND,

Guy
CHAPTER I

INTRODUCTION

In recent years the documented incidence of anorexia nervosa and bulimia has dramatically risen. Concurrently, there has been a corresponding increase in the professional attention received by this disorder, both in professional practice and in research publications. The recent increased interest and concern among mental health professionals seems related to the rising incidence of eating disorders, high relapse rates, treatment resistance, and the prolonged length of illness (Bemis, 1978; Russell, 1981).

Currently about five to fifteen percent of the population are anorectic or bulimic with the speculation that mild forms of these eating disorders are relatively common (Bemis, 1978). It appears that five to twenty-five percent of anorectics die as a result of physical complications related to starvation or suicide (Bemis, 1978). In addition, an unknown number of bulimics suffer serious medical problems and risk death due to physical complications or suicide. Feelings of depression, despair, hopelessness, and helplessness are paramount among both anorectics and bulimics.

The socio-cultural climate has become increasingly more charged in relation to weight, body shape and exercise. More and more women and men are becoming preoccupied with their weight, how the look, and what they eat. This has become particularly true of adolescents and young adults who are struggling to define themselves and search for acceptance.
by others. While females outnumber males, eating disorders and weight preoccupation is not exclusively a female problem. This is particularly true for males involved in a socio-cultural atmosphere which demands weight control (i.e., wrestling).

Several studies have documented that many adolescents and young adults perceive themselves as "fat" or overweight. This is despite the fact that the majority of these individuals would be classified as in the normal weight range for their age and height. Dieting has become a way of life for most women to the point where it has been called a "cultural obsession" (Schwartz, Thompson, & Johnson, 1982, p. 20). It is this atmosphere that has provided the context within which the "relentless pursuit of thinness" seen in eating disorders has grown to alarming proportions. Anorexia and bulimia have become the socially encouraged psychiatric disorder of this decade.

Some professionals feel that the current socio-cultural demands for thinness are directly responsible for the dramatic rise in eating disorders. A more realistic viewpoint is that socio-cultural pressures are just one of several hypothesized risk factors. Other factors which seem to predispose individuals to develop eating disorders are childhood trauma, impaired mother-child relationships, particular kinds of family systems (i.e., enmeshed, detached), biological weaknesses, environments stressing thinness or weight (i.e., dance, modeling, wrestling), and family members with documented affective disorders and/or alcoholism. Additional demographic information suggests that eating disordered individuals are likely to be white, upper-middle class, females who come from families where achievement and success are highly valued. It is believed that these kind of predisposing factors lead to individuals who
learn to regulate affect and self-esteem through controlling their weight and food intake.

Within this context professionals are coming to view eating disorders as existing on a continuum with anorexia and bulimia at one extreme, more mild forms in the middle, and weight-preoccupied individuals existing at the other extreme. These less severe normal weight individuals have been called 'anorectic-like', 'subclinical anorectics', 'pseudo-anorectics', and more recently 'weight-preoccupied' or 'chronic dieters'. The consensus is that anorexia represents more severe psychopathology than bulimia without anorexia (Norman & Herzog, 1983). However anorectics as a group tend to be more homogeneous than bulimics making generalizations about bulimics more difficult. Those with anorectic-like behavior and attitudes towards food and weight but without a full eating disorder syndrome may comparatively manifest the least severe psychopathology (Thompson & Schwartz, 1982).

Within the anorectic group, those with bulimia are hypothesized to have lower level personality organization than characteristic of restricting anorectics (Bram, Egar, Halmi, 1982; Garfinkel & Garner, 1982). However, research addressing these issues is still in early stages of development. In relation to depression, research seems to support that both anorectics and bulimics as a group seem to experience more depressive symptoms than do non-eating disordered individuals, with bulimic anorectics being most depressed (Casper, Eckert, Halmi, Goldberg, & Davis, 1980; Garfinkel & Garner, 1982; Norman & Herzog, 1983). However, research on specific qualitative profiles of depression in various eating disordered subgroups remains scarce.

In summary, the recent literature suggests that there may be sig-
significant psychological similarities and differences between eating disordered individuals, depending on the number and extend of predisposing factors present. Future research needs to focus on understanding subgroup similarities and differences better. The present study compares three eating disorder subgroups on several variables in an attempt to better understand the similarities and differences in depressive experiences and personality organization. More specifically, this study compares anorectic, bulimic, and weight-preoccupied groups on depression profiles, social adjustment, ego boundary deficits, thought disorder, and object representations.
CHAPTER II

REVIEW OF THE RELATED LITERATURE

Overview and Background of Eating Disorders

An Historical Perspective

Anorexia Nervosa. Historically, Morton is credited with publishing the first accounts of a case of anorexia nervosa in 1689 in his book *Phthisiologia: Or a Treatise of Consumption* (Nemiah, 1950). In this work he describes a nervous consumptive disorder and vividly gives accounts which would undoubtedly fit today's clinical picture of anorexia nervosa. In fact even today, in order to diagnose anorexia correctly differential diagnoses of tuberculosis or other medical disorders must first be made (Bruch, 1973).

While the anorexia nervosa syndrome was first described over 300 years ago, it was not until 1873 when the term 'anorexia nervosa' was used to describe such patients. In that year, Gull published a series of case studies under this name, a disorder he had previously referred to as 'hysterica apepsia' (Gull, 1873). At this time, Gull described in detail the physical and emotional state of a 15 year old physician's daughter with anorexia. At the same time in France, Laseque in 1873 also published eight case studies under the term 'anorexie hysterique' (Sours, 1980). However, Gull is credited with identifying the disorder because in 1868 he reported on a case of anorexia which he first called 'apepsia hysterica' (Gull, 1873). Both Gull and Laseque saw a distinct relationship between anorexia nervosa and hysterical syndromes, but they
appeared to have differed in their subsequent psychological understanding of anorexia nervosa (Nemiah, 1950). Despite this, there is little doubt that they were describing the same syndrome that today is known as anorexia nervosa.

In 1914 the etiological understanding of anorexia took a sharp turn when a disorder called Simmond's disease was identified, also known as pituitary anorexia (Bruch, 1973). This disease, like anorexia nervosa, results in rapid weight loss, thus further confusing the diagnostic picture. Because of this many cases of anorexia were incorrectly diagnosed as Simmond's disease, and anorexia nervosa became known as an endocrinological disorder. In fact, the possibility of an underlying endocrinological problem is still being entertained today as an explanation for the etiology of anorexia.

Around the turn of the century, case reports of anorexia began to be published with increasing regularity, and despite the confusion with Simmond's disease, anorexia began to be understood as a psychological disorder. Freud in 1918, described anorexia as an adolescent neurosis related to sexual conflicts (Wilson, Hogan, & Mintz 1983). In fact, Freud's accounts of Dora appear to document a case of anorexia and led him to hypothesize that this disorder was an adolescent form of melancholy (Bruch, 1973; Sours, 1974). By 1929, one of the first psychoanalytic treatment cases was presented by Oberholzer who viewed anorexia as "relating to the wish for a penis" with "conflicts between the desire to be like a man and the desire for a child from the father" (Bruch, 1973, p. 216). By 1940, several psychodynamic theories were being postulated. Anorexia nervosa had become clearly identified as a psychiatric syndrome.
Bulimia. Unlike anorexia nervosa, bulimia has only recently been identified as a psychiatric syndrome in its own right. However, as far back as 1873, bulimic behavior in anorexia was described. At this time, Gull documented episodes of uncontrolled eating lasting a few days, where his patients appeared to have a voracious appetite amidst severe emaciation and followed by a return to stringent dieting (Gull, 1873).

From the turn of the century until 1930, descriptions of bulimic behavior in anorectics became virtually nonexistent (Casper, 1983). This coincided with the increased physiological focus on anorexia. While reports of vomiting and gastrointestinal problems are mentioned in relation to anorexia, this was not a primary focus of discussion. In addition, these symptoms were frequently attributed to nerves and physical problems and rarely addressed as a psychological problem. Then in 1930, Berkman reviewed 117 cases of anorexia admitted to the Mayo clinic between 1917 and 1929. He noted that vomiting occurred in 56 to 66% of these cases (Berkman 1939). Following this commentary, the next 30 years showed binge eating and vomiting being identified and described in increasing numbers (Casper, 1983).

Historically, probably the first detailed documentation of bulimia was in Ellen West's diary published by Binswanger in 1944. In her diary, Ellen West clearly described her desperate struggle with both bulimia and anorexia as well as severe depressive episodes. In detail she described her problems with binge eating, vomiting and laxative abuse, alternating with periods of self-inflicted food deprivation and severe weight loss which eventually led to her death at an early age (Binswanger, 1944).

While documented cases of bulimia in anorexia are traceable back to
the nineteenth century, bulimia in non-anorectics seems only to have recently been identified and described (Bliss & Branch, 1960). While this appears partially due to bulimic behavior being attributed to physiological problems, undoubtedly this also related to a change in the socio-cultural climate of Europe and America. Casper (1983) notes that around 1940, increasing references were made to body shape, weight preoccupations and "plumpness" (p. 13). She related this cultural change to the emergence of bulimia as a syndrome. Additionally, she points to the increased use of contraceptives in the fifties to decreased fears of pregnancy and sexuality. She sees this fear as being replaced by increased fears of becoming fat as a primary rationalization for weight loss.

The Eating Disorders Continuum:

Symptomatology and Nosological Considerations

Anorexia Nervosa. The term anorexia nervosa literally translated means loss of appetite due to nervousness. This term originally coined by Gull in the nineteenth century has recently received much criticism because these patients do not actually lose their appetite until severe emaciation and starvation states have been reached during later phases of the disorder (Garfinkel, 1974). In fact, severe weight loss appears unrelated to loss of appetite. Rather, anorectics become obsessed and preoccupied with food intake and weight loss in the face of severe starvation and physical danger.

In describing the syndrome of anorexia nervosa, several researchers make a point of distinguishing primary and secondary anorexia. In primary anorexia, weight loss is purposeful and self-inflicted while in secondary anorexia weight loss is a result of other problems such as
schizophrenia, primary depression, and gastrointestinal problems, and is not the primary goal of the patient (Bruch, 1973; Dally 1969; King, 1963). Patients with secondary anorexia are able to see themselves as emaciated and remain dissatisfied with their thin state, with weight loss being ego-dystonic.

While secondary anorectics as a group seem to be very heterogeneous, primary anorectics seem to have much in common ranging from demographic factors to family patterns and psychological characteristics (King, 1963). Both King (1963) and Bruch (1973) have identified these two groups of anorectics and have suggested that focus be placed on the primary anorectics in understanding this disorder. In 1969, Dally also distinguished subgroups of anorectics which he called Group O (Obsessional-53%), Group H (Hysterical-21%), and Group M (Mixed-26%). This last group most closely resembles King's group of secondary anorectics. Group O is closest in description to primary anorectics with symptoms of food refusal, overeating, purging, and increased exercise. Group H displayed symptoms such as lack of appetite, absence of binge eating and purging, and gastrointestinal discomfort leading to weight loss. Likewise, Selvini Palazzoli (1974) views the pursuit of weight loss despite hunger as the central feature of true anorexia.

Perhaps most well known is Bruch's descriptions of primary anorexia. According to Bruch (1973), the hallmark of anorexia is the relentless pursuit of thinness despite severe emaciation, physical danger, and even death. She believes that primary anorectics hold in common their "struggle for control, for a sense of identity, competence, and effectiveness" (p. 251). Overall, Bruch sees three characteristics as descriptive of primary anorectics: (1)"a disturbance of delusional
proportions in the body image and body concept, including denial and a lack of concern of cachexia, (2) "a disturbance in the accuracy of the perception or cognitive interpretation of stimuli arising in the body" including an inability to recognize hunger states, hyperactivity and apparent lack of fatigue, and the absence of "sexual functioning" and "sexual feelings", and (3) "a paralyzing sense of ineffectiveness which pervades all thinking and activities" (p. 253-254). In summary, she characterizes this disorder as a "desperate struggle to attain a sense of control and personal identity" where "food intake and body size are manipulated in a futile effort to solve or camouflage inner stress or adjustment difficulties (1977, p. 102).

Another well known author on anorexia is Selvini Palazzoli (1974) who views primary anorexia as "a deliberate and increasing refusal to eat enough which eventually causes severe emaciation; constipation, and neuromuscular overactivity" (p. 25-26). In discussing Bruch's description of anorexia, she states that she agrees with her diagnostic criteria but adds that in her experience not all anorectics believe they look normal but rather refuse to admit to how they look because of panic about becoming overweight and fear that their eating and weight gain will become out of control. She characterizes anorexia as a deliberate pursuit of thinness with lack of concern over excessive weight loss and amenorrhea, and an energetic alert state often accompanied by hyperactivity.

Despite individual authors' differences, the clinical syndrome of anorexia nervosa, and its symptomatology has become fairly consistent and identifiable. In 1972, Feighner, Robbins, Guze, Woodruff, Winokur, & Munoz published research criteria for 12 psychiatric syndromes includ-
ing anorexia nervosa. For anorexia, six basic criteria were outlined:

1. Age of onset prior to 25.

2. Anorexia with accompanying weight loss of at least 25% of original body weight.

3. A distorted, implacable attitude towards eating, food, or weight that overrides hunger, admonitions, reassurance and threats.

4. No known medical illness that could account for the anorexia and weight loss.

5. No other known psychiatric disorder with particular reference to primary affective disorders, schizophrenia, obsessive-compulsive and phobic neurosis.

6. At least two of the following manifestations:
   a) amenorrhea lanugo
   b) bradycardia
   c) periods of overactivity
   d) episodes of bulimia
   e) vomiting

More recently in 1980, DSM III published diagnostic criteria for anorexia nervosa as follows:

1. Intense fear of becoming obese which does not diminish as weight loss progresses.

2. Disturbance of body image.

3. Weight loss of at least 25% of original body weight or, if under 18 years of age, weight loss from original body weight plus projected weight gain expected from growth charts may be combined to make the 25%.
4. Refusal to maintain body weight over a minimum normal weight for age and height.

5. No known physical illness that would account for the weight loss (APA, 1980, p. 69).

Since 1980, several criticisms of these two sets of diagnostic criteria outlines have been made. One major criticism relates to age cutoffs and the arbitrary use of weight loss criteria (Askevold, 1983; Halmi, 1983). In relation to age criteria, Askevold (1983) proposed that age limits of 13 to 20 are more representative, while Halmi (1983) suggested that a reclassification of anorexia should include no age exclusions. Regarding weight loss criteria, the general consensus is that there is no magic number but rather weight loss should be evaluated in relation to the "will to alter body shape" (Askevold, 1983, p. 40). Most professionals seem to feel more comfortable with the fourth DSM III criteria in relation to weight loss criteria. A second criticism is that many of the current diagnostic criteria used in defining anorexia do not occur in all anorectics and some are rather an outgrowth of the pursuit of thinness and physical consequences of weight loss (bradycardia, lanugo hair, overactivity, vomiting) (Askevold, 1983; Halmi, 1983).

Lastly, whether or not anorectics actually fear becoming obese has been debated. What appears more accurate is that severe body image disturbance typically occurs only in the later phases of anorexia (Askevold, 1983). What is really feared is that eating will become out of control. The end result of this continuing debate is that while current diagnostic criteria remain problematic, most professional use a combination of the two diagnostic sets of criteria presented here.
Bulimia in Anorexia Nervosa. Since the early case studies describing anorexia, two kinds of primary anorectics have been clearly identified: restricting anorectics and bulimic anorectics. Restricting anorectics attain weight loss through restricting food intake and sometimes increasing activity levels, while bulimic anorectics may restrict food intake alternating with consuming large quantities of food and then purging using self-induced vomiting and/or laxatives.

Many researchers have documented these two subtypes of anorexia. In 1976, Beaumont, George and Smart, classified anorectics into Dieters and Purgers, and identified 18% of dieters as bulimic, while 48% of purgers were considered bulimic. In 1980, Garfinkel, Moldofsky and Garner classified 48% of their anorectic sample as bulimic.

Casper, Eckert, Halmi, Goldberg and Davis (1980) studied bulimia in anorexia in 105 hospitalized anorectic patients. In this group, 53% were classified as restricting anorectics and 47% were considered bulimic anorectics. Casper et al compared these two groups on a variety of demographic and psychological variables to determine similarities and differences. It was found that bulimic subjects were significantly older, were more likely to purge, compulsively steal, tended to be more outgoing, more frequently experienced a decreased sexual interest, and were experiencing significantly more emotional problems prior to hospitalization.

The belief that restricting and bulimic anorectics may represent different variants of the disorder is confirmed by several other recent studies (Garfinkel et al, 1980; Garfinkel and Garner, 1982; Russell, 1979). Garfinkel and Garner (1982) reported that bulimic anorectics have more histories of pre-morbid obesity and tend to be more extro-
verted and sexually involved. They also point to a general loss of impulse control as evidenced by greater incidences of kleptomania, drug and alcohol abuse, and self-mutilation. They too describe poorer affect regulation and less social isolation in bulimic anorectics. Garfinkel and Garner concur with other researchers in believing that bulimia in anorexia nervosa points to an ominous and poorer prognosis with greater psychological distress, and a more chronic type of eating problem (Crisp, Kalvey, Lacey, & Harding, 1977; Garfinkel, Moldofsky, & Garner, 1977; Morgan & Russell, 1975).

**Bulimia in Normal Weight Individuals.** In addition to being a problem for a subgroup of anorectics, bulimia in normal weight individuals exists in its own right (Boskind-Lohdahl, 1976; Bruch, 1973; Palmer, 1979). Although currently this disorder is most frequently called bulimia, terms such as 'binge eating' (Bruch, 1973; Wardle & Beinart, 1981); 'dysorexia' (Guiora, 1967); 'compulsive eating' (Orbach, 1978); 'bulimarexia' (Boskind-Lodahl, 1976); 'dietary chaos syndrome' (Palmer, 1979); and 'bulimia nervosa' (Casper, 1983; Russell, 1979) are all words used to describe this syndrome.

Bulimia, like anorexia, seems to be a growing problem for adolescent and young adults. However, bulimia in normal weight individuals is a much less clearly understood eating disorder. This is partially attributed to its only recent recognition as a psychiatric syndrome. In fact, bulimia was not listed as a psychiatric syndrome until the third edition of DSM in 1980. Since then dissatisfactions with these diagnostic criteria have been voiced and the debate over whether bulimia is a distinct syndrome or rather a point on the eating disorder continuum continues (Gandour, 1984; Holmgren, Humble, Norring, Roos, Rosmark &
fasting. In addition, no subject could be currently diagnosable as ano­rectic. Her sample consisted of 20 normal weight, 12 overweight, and 2 obese women some of whom had a prior history of anorexia. She reported that these women strongly resembled anorectics in their drive for thin­ness and feelings of helplessness, but felt they were less disturbed as a whole because of their ability to maintain social and work functioning despite of the problem with bulimia.

In 1979, Russell selected 30 patients for his study on 'bulimia nervosa'. His criteria required subjects to both binge and purge and to be terrified of being fat. He noted that 17 of these patients were for­merly anorectic, while 7 were 'cryptic anorectics' (subclinical weight loss or maintenance of low body weight). He does not consider bulimia to be a syndrome in its own right but rather as a form of anorexia ner­vosa. He proposed that bulimia represents a chronic course of anorexia or part of the recovery phase of anorexia, with similar psychiatric problems and etiology in both. In reference to the six bulimic patients who had no history of anorexia or cryptic anorexia, he commented that his sample may be self-selected towards anorexia and that more research needs to be done concerning this other group of patients. He concluded by stating that bulimia may be regarded as a syndrome so long as conclu­sions regarding etiology are not made. He stated that the prognosis for bulimics appears to be worse than for restricting anorectics and pointed to the high rate of depression in his sample.

Following the publishing of the DSM III (1980), Pyle, Mitchell, & Eckert (1981) reported on 34 bulimic patients who were not anorectic. They reported that most subjects in their sample binged daily and purged using laxatives and vomiting more than once week. They noted that most
patients became bulimic following a severely restrictive diet. Of these 34 patients, 5 had been previously treated for anorexia and 5 more had lost at least 15% of their body weight. They concluded that bulimia is indeed a syndrome separate from anorexia.

In 1982, Johnson and Berndt published a study examining the social adjustment of 80 bulimics. In this sample 92% binged at least weekly (50% daily), with 67.9% purging by self-induced vomiting at least weekly (45.7% daily), and 32% purging by laxative abuse at least weekly (14%). No subjects were currently anorectic or obese, 61.6% were normal weight, 17.5% were overweight, and 20.9% were underweight. Results of this study showed that compared to normals, bulimic subjects showed significant impairment in social adjustment. They suggest that "the deterioration in functioning is a result of progressive involvement in chaotic eating" (p. 7). They found their profiles to be similar to alcoholics, and suggest that bulimia may interfere with life adjustment in a way similar to addictive disorders such as alcoholism.

Researchers are beginning to study incidence and prevalence of bulimia in clinical and nonclinical samples. Most use DSM III criteria or modifications of these criteria. Pyle, Mitchell, Eckert, Halvorson, Neuman & Goff (1983) reported that within their college sample 2.1% qualified for their modified DSM III criteria of bulimia. They found that bulimic students differed from bulimic patients in their use of fasting to control weight as opposed to purging. Using their modified criteria, only 2.1% reported weekly binge eating while only .6% reported weekly binge eating and purging. However, 100% of bulimic patients reported binge eating weekly and 91.9% binged and purged weekly.

Katzman, Wolchik & Braier (1984) in surveying a college population
found that while 49% had problems with binge eating, only 7.2% had at least 8 episodes per month, and only 4% qualified for a DSM III diagnosis of bulimia. Within this 4% no figures are given for purging behavior. These findings are in contrast to the figures reported by Halmi et al (1981) who found the incidence of bulimia to be 13% in a nonclinical sample with 10% of the sample also purging.

These findings suggest that, while initially the incidence of bulimia was thought to be quite high, only a small percent actually qualify for a diagnosis of bulimia when frequency distinctions are added to the DSM III criteria, and that an even smaller amount look similar to bulimic patients. Thus, the general conclusion reached is that DSM III criteria are overinclusive and tend to overdiagnose the syndrome of bulimic in nonclinical samples (Pyle et al, 1983).

In the last two years, researchers have suggested that DSM III criteria be modified and operationalized particularly in research studies when trying to identify individuals with a significant problem with bulimia. Typical modifications to DSM III criteria are: (1) binge eating should occur 8 times monthly or once weekly, (2) each binge should equal approximately 1,200 calories, (3) repeated attempts to lose weight should occur at least twice monthly if not once weekly, and (4) no incidence of anorexia should have occurred in the past year (more than 25% weight loss) (Katzman & Wolchik, 1984). Some researcher additionally suggest that weekly purging either by self-induced vomiting and/or laxative abuse must occur (Pyle et al, 1983). It is believed that use of these more stringent criteria will identify bulimia as a psychiatric syndrome as opposed to a cluster of symptoms prevalent in nonclinical populations and related to other primary psychiatric syndromes.
Weight Preoccupation. With increasing socio-cultural pressures to be thin, more and more people are restricting their food intake and chronic dieting has become common place in attempting to attain the thin ideal image (Schwartz, Thompson & Johnson, 1982). In discussing eating disorders, the debate continues as to whether anorexia and bulimia represent separate diagnostic entities or points on a continuum with anorectics at one extreme and chronic dieters at the other (Garner, Olmsted, Polivy & Garfinkel, 1984). To attempt to examine this question more closely, recent work has begun to compare and contrast these groups.

Individuals who are preoccupied with their weight and body shape have been called thin fat people, anorectic-like, pseudo-anorectics, subclinical anorectics, chronic dieters, and most recently weight-preoccupied individuals. According to Button & Whitehouse (1981) these individuals "experience preoccupation with weight and the forms of behavior associated with anorexia nervosa without being extremely emaciated" (p. 517).

In 1971, Nylander surveyed female high school students in Sweden to determine the prevalence of anorectic-like attitudes within a non-clinical sample. His findings showed that 26% of younger adolescent girls reported feeling fat at times, and that by age 18, 50% described themselves in this way. In addition, 10% reported three or more anorectic symptoms. He concluded that these results provide support for understanding eating disorders as existing on a continuum.

Garner & Garfinkel (1978) were among the earliest to study this phenomenon in relation to eating disorders. They focused on socio-cultural influences on anorectic-like individuals to try to identify their
role in anorexia. To do so they studied a group of 112 ballet dancers (who well fit the description of pseudo-anorectics), and compared their Eating Attitude Test scores ('EAT' developed by Garner & Garfinkel) to 33 anorectics and 59 control subjects. Results showed that 5% of ballet students were diagnosable as anorectics and 28% scored in the symptomatic range on the EAT with scores greater than 32). Mean EAT scores for dancers were significantly higher than for normals. The authors concluded that pseudo-anorexia and anorexia is more frequently found in dancers than in the general population. They suggested that socio-cultural pressures for thinness and/or a predisposition for anorectic-like individuals to seek out dance may explain this finding.

In 1982, Thompson & Schwartz published a study comparing life adjustment in anorectic, anorectic-like, and normal women in an attempt to draw psychological distinctions between these two groups. In this study, anorectic-like subjects were selected based on EAT scores greater or equal to 25 provided they were within 10% of normal weight ranges. Results showed that anorectic subjects evidenced much more psychological distress and impaired life adjustment than anorectic-like women but that anorectic-like subjects were also more impaired than normals.

One major problem with this and other such studies is that individuals making up the anorectic-like group are too heterogeneous. In fact, in the Thompson and Schwartz study (1982), 52% of the anorectic-like group reported moderate to severe binge eating, self-induced vomiting, and 20% reported laxative abuse. Thus, by current diagnostic criteria this group of subjects undoubtedly contained bulimic individuals and not just chronic dieters.

In 1984, Garner, Olmsted, Polivy & Garfinkel conducted a study
comparing anorectic, weight preoccupied, and non-weight preoccupied women. Weight preoccupied women were selected based on elevated Drive for Thinness scale scores on the Eating Disorders Inventory ('EDI', developed by Garner, Olmsted & Polivy, 1983) defined as scores greater to or equal to 15, the mean for anorectics. After this, 12 weight preoccupied and 12 non-weight preoccupied women were independently interviewed and classified as belonging to one of four groups: (1) normal dieters, (2) abnormal preoccupation with weight, (3) current or past evidence of anorexia or bulimia, or 4) not weight preoccupied.

In the weight preoccupied group, 2 subjects had prior histories of anorexia, 1 was currently bulimic (daily), and 6 had weekly to monthly bulimic episodes, 3 were considered normal dieters. All of the 12 non-weight preoccupied women were judged to be not preoccupied with their weight. Results comparing the three original groups showed that "certain traits frequently observed in anorexia are relatively uncommon in a group of weight preoccupied women, while others typify both groups" (p. 263).

Subanalyses of the weight preoccupied group showed two distinct subgroups, one similar to anorectics on all but the Ineffectiveness subscale of the EDI, and the other with only elevated Drive for Thinness, Body Dissatisfaction, and Perfectionism EDI subscale scores. The authors concluded that "while it could be speculated that chronic dieters may be motivated more by a desire for physical attractiveness and social approval, the anorectic patient may limit intake to gain a sense of psychological organization" (p. 264)

Summary. Within the eating disorder continuum several distinct subgroups have been identified and are consistent with research find-
ings. Presently, much of the current literature supports the finding that while there is an eating disorder continuum, anorexia and bulimia represent distinct points on this continuum. While it has not been consistently shown that restricting and bulimic anorectics are distinct and separate subgroups, current work may help to identify differences as well as similarities among these subgroups. In addition, present work is attempting to understand the relationship between weight-preoccupied individuals and other more severe eating disorders. Thus, it appears that the current work on understanding subgroups of eating disorders is beginning to identify some of the similarities and differences within the eating disorder continuum.

**Depression and Eating Disorders**

Several psychological problems have been identified in anorectic and bulimic individuals. Among these, depression or depressive features are frequently referred to in describing eating disordered patients. Because of this, it has been postulated that eating disorders are a variant of affective disorders, or a defensive stance against depression, particularly anaclitic depression (Blitzer, Rollins, & Blackwell, 1961; Cantwell, Sterzenberger, Burroughs, Salkin, & Green, 1977; Hudson, Laffer, & Pope, 1982; Hudson, Pope, Jonas, & Yurgelun-Todd, 1983; Sugarman, Quinlan, & Devenis, 1981; Winocur, March, & Mendels, 1980).

A relationship between eating disorders and depression has been identified by many researchers. However, most agree that depressive problems may only exist for a subgroup of patients and do not typify all eating disordered individuals. In trying to identify this subgroup who are also depressed, researchers have speculated that bulimics, whether
anorectic, normal weight, or obese are more likely to exhibit moderate severe depressive symptoms. This goes along with the belief that to bulimic individuals are generally more symptomatic than restricting anorectics. However, this contention is also challenged by those who believe that restricting anorectics use denial as a primary defense (Blitzer et al, 1961; Sugarman et al, 1981). Thus, they propose that the patient's denial of depressive feelings does not necessarily point to an absence of an underlying depression. Proponents of this hypothesis point to the emergence of overt depressive symptoms with weight gain and in later phases of treatment, as well as the fact that these patients often look and act depressed. In addition, eating disordered patients are clearly involved in self-destructive patterns with death as a realistic concern.

Support for the claim that depression is often found in eating disordered patients comes from several sources. To begin with, neuroendocrine and sleep studies suggest common physiological patterns in depression and eating disorders which cannot be explained by weight loss alone (Gwirtsman, & Gerner, 1981; Gwirtsman, Roy-Byrne, & Yager, 1983; Hudson, Laffer, & Pope, 1982; Katz, Kuperberg, Pollack, Walsh, Zumoff, & Weiner, 1984). Also recent studies have shown that use of antidepressants such as imipramine, is significantly correlated with decreased depression, and weight gain in anorectics, and decreased binge eating in bulimic patients. Several studies show a higher incidence of affective disorders, and disorders such as alcoholism and drug abuse (part of the affective disorder spectrum), in relatives of eating disordered patients. Finally, several studies have documented specific depressive symptoms in both anorectics and bulimics.
Since the current study is concerned primarily with the prevalence of depression and specific depressive symptoms in eating disordered patients rather than the etiology of these symptoms, biological and drug studies will not be addressed further here. The remainder of this section will examine the literature on the familial incidence of depression, the quality of depression, and the frequency of depression in eating disordered individuals.

**Familial Incidence of Depression**

Cantwell et al (1977) were one of the first comprehensive studies published on the incidence of affective disorders in the families of eating disordered individuals. This study consisted of follow up data (4.9 years post discharge) on 26 adolescents with primary anorexia and their first and second degree relatives. Information was obtained from 26 pairs of parents and 18 patient interviews. Results of this study showed that a large number of families had histories of affective disorders. In this sample, two fathers, fifteen mothers, six siblings, and three maternal grandparents were diagnosed as having a history of affective disorders, with four of the mothers making suicide attempts. In addition, alcohol abuse was diagnosed in four fathers, three mothers, two siblings, five maternal grandparents and two paternal grandparents, while drug abuse was diagnosed in two siblings. Thus, both affective disorders and substance abuse were significantly present in several family members. Unfortunately, no normal control group was used for comparison, anorectics were not divided into subgroups, and it was unclear whether coexisting diagnoses of substance abuse and affective disorders were made.

Following Cantwell et al's study, several researchers have further
explored these findings. Winocur, March, & Mendels (1980) studied the relatives of 25 anorectic patients and 25 normal controls for presence of primary affective disorders ('PAD'). Normal subjects had no histories of anorexia or depression. Research Diagnostic Criteria (RDC) were used to diagnose PAD in relatives based on semi-structured interviews. Results of this study showed that 22% of anorectics' relatives (n = 43) compared to 10% of control subjects' relatives (n = 17) had a history of PAD. In the anorectics' relatives, 34 of the 43 with PAD were diagnosed with histories of depression and 9 with bipolar disorders. These authors speculated that anorexia may signify, "an end point clinical syndrome that can be reached by a variety of paths" (p. 697). They concluded that "there may be a subgroup of patients with anorexia nervosa who have a genetic loading for affective disorder and manifest a mixed clinical picture of anorexia nervosa and affective disorders" (p. 697).

In 1981, Strober conducted a study examining possible etiological variables in bulimic anorectics (1981b). His sample included 44 adolescent anorectic females, 22 of which had problems with binge eating. Along with several other measures, anorectics' families were interviewed using the Schedule for Affective Disorders and Schizophrenia (SADS) and the RDC. This study showed significant differences between restricting and bulimic anorectics in terms of familial histories of affective disorders and alcohol abuse. Statistically significant differences were found between fathers in both groups and trends were seen in comparing mothers. Histories of affective disorders were found in 32% of the mothers of bulimic anorectics, and 14% had histories of alcohol abuse, while mothers of restricting anorectics showed incidence rates of 9% and 0% respectively. Of the fathers of bulimic anorectics, 50% had histo-
ries of affective disorders and 36% abused alcohol while only 18% and 5% of restricting anorectics' fathers had histories of these disorders. These data support prior claims of high rates of affective disorders and substance abuse in relatives of anorectics. They further provide evidence that bulimic anorectics are more likely to fit this description than are restricting anorectics.

Gershon, Hamovit, Schreiber, Dibble, Kaye, Nurnberger, Anderson and Ebert (1983) studied the presence of affective disorders and eating disorders in anorectics' relatives and subdivided anorectics into presence or absence of affective disorders. Their study included 24 patients and their families and 43 normal controls and used the SADS-L (lifetime version), RDC, and DSM III criteria for eating disorders. Results showed that 21.6% of anorectics' relatives (n = 99) compared to 6.3% of controls' relatives (n = 265) had histories of affective disorders. In addition, 6.4% of anorectics' relatives (3.4% anorexia, 3.0% bulimia) compared to .8% of controls' relatives (0% anorexia, .8% bulimia) had histories of eating disorders. When relatives were divided in presence or absence of affective disorders, 1.4% of anorectics' relatives with affective disorders also had eating disorders, while 5.0% of the non-affective group had eating disorders. In the control group, .5% of affective disordered relatives also had an eating disorder while .8% of non-affective disordered relatives had an eating disorder. These findings suggest that "an independent predisposition for anorexia must be superimposed on a predisposition to affective disorders for anorexia to be manifest" (p. 283). In addition, this study provides support for a familial connection in the development of an eating disorder.

Recently, in another study, Gershon, Shreiber, Hamovit, Dibble,
Kaye, Nurnberger, Anderson, & Ebert (1984) examined 24 anorectics' relatives for affective disorders, and subdivided the anorectics into those with affective disorders, self-induced vomiting, or bulimia as compared to 43 normal controls' relatives. Results of this study showed again that relatives of anorectics were more frequently depressed than controls' relatives. This was true regardless of presence or absence of affective disorders, bulimia, or self-induced vomiting. They hypothesized that the high presence of affective disorders and eating disorders in both patients and their relatives may, "reflect shared genetic vulnerability" (p. 1412).

One of the few comprehensive studies on affective disorders in relatives of normal weight bulimics was conducted by Stern, Dixon, Nemzer, Lake, Sansone, Smeltzer, Lantz, and Schrier (1984). Subjects in this study were relatives of 27 bulimic women (with no history of anorexia) and 27 non-eating disordered control women. In contrast to prior studies, they found that 9% of bulimics' relatives compared to 10% of controls' relatives had histories of affective disorders.

This study differed from the others in that controls were not screened out if they had a history of affective disorders. This was done purposely so that the control group would more represent a normal population. Thus when control subjects with histories of affective disorders are included, relatives of both groups show similar percentages of affective disorder. The authors concluded that eating disordered individuals are a heterogeneous group and that symptoms of affective disorders, vomiting, or bulimia are not predictive of higher familial depression.

In summary, the results of the majority of studies provide evi-
dence of a higher incidence of affective disorders in relatives of eat-
ing disordered individuals. However, many of these studies either did
not use a control group or used control groups with subjects screened
out for affective disorders, thus clouding the implications of results.
Results of the one study that did not screen out affective disorders in
controls suggest that some eating disorders may be related to familial
loadings for affective disorders while others are probably not. In any
case, familial incidence of affective disorders in eating disordered
patients appears to range from 9 to 22 percent while non-eating disorder
controls range from 6 to 10 percent. On the whole these data do indeed
suggest a familial relationship between eating disorders and affective
disorders, particularly depression.

Depressive Features in Eating Disorders

Although the familial incidence of affective disorders has been
documented, the question remains as to the coexistence of depression in
eating disordered individuals themselves. Research and case studies
dating back to the early 1900's discuss the high prevalence of depres-
sive symptoms in these patients and the obvious self-destructiveness of
starvation and purging. Around this time Gee (1915) recognized melanc-
holic features in anorectics, along with prominent suicidal ideation.
Freud also considered anorexia to be a form of melancholia.

The diary of Ellen West, published by Binswanger in 1944, presents
a detailed count of a young girl suffering from depression along with
anorexia and bulimia. Bruch quotes her as writing, "the most horrible
thing about my life is that it is filled with continuous fear. Fear of
eating. Only death can liberate me from this dread"..."Since I am doing
everything from the point of view of whether it makes me thin or fat,
all things lose their real value" (1973, p. 220). In her diary, Ellen West became increasingly preoccupied with suicidal ideation and dreams of death, and she eventually committed suicide.

While some anorectics admit readily to depressive feelings, others steadfastly deny any psychological problems. The reported absence of depression suggests that some anorectics may indeed not be depressed, or that denial of depression is part of the overall denial of illness often seen in anorectics. Blitzer, Rollins, & Blackwell (1961) were among the first to write in detail about anorexia as a defense against depression.

Blitzer et al (1961) stated that 13 of their 15 anorectic patients showed depressive symptoms of, "withdrawal of interest from other people and outside activities, sad faces, reluctance to face the future, and difficulty expressing strong affect either of a pleasureable or negative sort" (p. 377). In addition, anorectics appear unconcerned with the severity of their physical state.

These authors explain patients' hyperactivity as a self-destructive act, but note that self-destructive fantasies and guilt are difficult to elicit in these patients until later phases of treatment. As further evidence, the authors point to increased overt symptoms of depression with weight gain, and chronic depression pre-dating anorexia in three of their patients. The authors speculate that, "the depression was related to the mother-child relationship, especially the fear of losing maternal love by growing up. Disgust led to anorexia while unexpressed anger led to depression" (p. 378).

In the literature on affective disorders in eating disorders, prevalence rates from 5% to 85% have been reported in anorectics, with rates from 35% to 77% reported in bulimics. Most agree that depressive
symptoms, particularly dysphoric mood, are frequently associated with eating disorders. However, until recently these findings have not been examined using diagnostic criteria such as the RDC, SADS, DSM III or self-report measures, and few have compared subgroups of eating disorders.

One of the earlier research findings on depression in anorectics was published by Stonehill & Crisp (1977) in a study on psychoneurotic characteristics in 45 anorectics pre and post treatment. They compared results from the Middlesex Hospital Questionnaire (MHQ) and the Eysenck Personality Inventory (EPI) with 90 normal subjects, 39 depressed patients, and 14 phobic patients. In relation to depression, their findings showed that anorectics reported being less depressed compared to depressed patients, but more depressed than normals. However, they noted that bulimic anorectics were characterized by higher depression scores than restricting anorectics. In addition, at follow-up four to seven years later, bulimic anorectics were doing less well.

In the Cantwell et al study (1977) referred to earlier, follow-up data found that anorectics still had significant psychiatric problems. Using interviews of patients and their parents, they found quite high frequencies of affective disorders, particularly depression, both pre-morbidly (obtained retrospectively) and at follow up. Based on this and the high family incidence of affective disorders found by these authors, they concluded that "at least some cases of anorexia nervosa may be a variant of affective disorders" (p. 1093). They hypothesized that anorexia could be "an atypical affective disorder occurring in an adolescent female at a time in her life when body image issues are quite important. Thus the vegetative symptoms of affective disorders (such as
anorexia and weight loss) may become accentuated, and the self-doubt and self-recrimination of the depressive may focus on body image" (p. 1093).

Up until 1979, the majority of studies on depression in eating disorders focused on anorexia. This is not surprising given that research in general has only more recently focused on bulimia. However, in 1979, Russell published a study on 'bulimia nervosa'. As discussed earlier, Russell's study included patients with and without histories of anorexia along with a control group of 30 current restricting anorectics.

In this study patients' records were reviewed for several kinds of symptoms including depression. He noted that "depressive symptoms were the most prominent features of the patients' mental state" (p. 440). However, he commented that typical symptoms of endogeneous depression such as psychomotor retardation, diurnal mood variation, self-blame, and difficulty performing daily activities were not characteristic features of bulimics. More characteristic in these patients were "subjective feelings of gloom and recurrent suicidal thoughts" along with concentration problems, and irritibility (p. 440). Out of his sample of 30 bulimics, 11 had made one or more suicidal attempts, with one death attributed to suicide, and a second death suspected to be a suicide.

Russell summarized his depression findings using a three point scale. Grade 1 consisted of 4 patients who did not appear depressed. Grade 2 consisted of 13 patients with symptoms of "severe and persistant gloom with suicidal ideas, minor suicidal acts, marked irritibility, severe impairment of concentration" (p. 440). Grade 3 consisted of 13 patients with one or more of symptoms of severe depression "leading to inability to work or cope with daily activities, a previous course of
electro-convulsive treatment, a serious suicidal act" (p. 440). Thus 87% of Russell's sample displayed significant depressive symptoms, with 43% showing severe signs. Unfortunately Russell did not elaborate on his findings for the comparison group.

Casper, Eckert, Halmi, Goldberg, and Davis, (1980) conducted a comprehensive study of bulimia in anorexia and compared 56 restricting and 49 bulimic anorectics on a number of variables including depression. Casper et al found that prior to admission, bulimic anorectics were significantly more symptomatic, with "significantly higher depression scores (feeling lonely or blue, crying spells, worry)... higher obsessions scores related to food...and higher somatization scores" (p. 1032). Results of the Hopkins Symptom Checklist showed higher feelings of guilt, and the MMPI showed significantly higher depression scores. Bulimic anorectics showed more sleep disturbances. Frequency of bulimic episodes was also more highly correlated with depressive symptoms as well as other psychiatric distress. In addition, only bulimic patients had problems with alcohol abuse. Overall, these findings support prior reports of depression and psychic distress being associated more with bulimic than restricting anorexia.

Strober (1981a) published a detailed study comparing 22 bulimic and 22 restricting adolescent anorectics on several measures. He stressed the importance of using adolescents as he felt that their young age prevented contamination of findings due to chronicity of illness. Strober found that bulimic anorectics as children were characterized as "unhappy; crying easily; clinging to parents, ritualistic; worrying about illness; and fighting with peers" (p. 35). These findings suggest that pre-morbidly, bulimic anorectics showed more "evidence of affective
instability and the emergence of maladaptive tension-regulating mechanisms" compared to restricting anorectics (p. 35). Furthermore, his results suggested a picture of childhood depression which pre-dates the eating disorder. In addition, bulimic anorectics admitted to significantly higher levels of depression on the Psychiatric Rating Scale for Anorexia nervosa (PRSAN) than restricting anorectics.

In 1981, Sugarman, Quinlan, & Devenis published an excellent theoretical paper on anorexia as a defense against anaclitic depression. Much of their article discusses their psychodynamic conceptualization of anorexia which will be detailed in the following chapter on personality organization. In relation to depression however, they postulate that a "developmental arrest at the transitional period between the differentiation and practicing subphases, and at a level of sensorimotor representation promotes a vulnerability to anaclitic depression" (p. 55).

According to Sugarman et al, anaclitic depression is related to intense dependency needs rather than feelings of guilt and inadequacy more often found in introjective or neurotic depression. These authors propose that "anorectic patients manifesting an infantile personality disorder suffer from core depression which is characterized by feelings of helplessness, weakness, emptiness, abandonment, being unloved, and inferiority" (p. 56). They further add that depression in anorexia is a "more diffuse and unarticulated sense of tension arising from an experience of object loss" (p. 56). The denial of depression often seen in these patients is understood as a lack of awareness of feeling states which get interpreted as feelings of emptiness, boredom, and lack of meaning.

The authors conclude that anorexia occurs primarily in adolescence
because this stressful developmental period promotes a "resurgence of anaclitic depression precipitated by new developmental demands to separate from the childhood love objects" (p. 57). Thus, the developmental arrests in anorectics leave these patients vulnerable to "separation experiences and the sense of depression, loss and helplessness which accompany these experiences (p. 44). Anorexia is consequently viewed as an attempt to defend against these feelings of early loss and deprivation.

One of the few studies to examine subgroups of normal weight bulimics was conducted by Stuckey (1981). In an unpublished study, Stuckey compared purging (BP) and non-purging (BR) bulimics to non-eating disordered normal weight women (NE) on several variables related to depressive experiences. Results of this study showed that high EAT scores were significantly correlated to high scores on the Multi-score Depression Inventory (MDI) and the Depressive Experiences Questionnaire (DEQ). This was particularly true for scales measuring self-criticism, guilt, and low self-esteem.

In relation to severity of depression, it was found that on the MDI and on the DEQ Dependency scale, bulimics were more depressed than non-eating disordered subjects. On the DEQ Self-Criticism scale significant differences were found between purging and non-purging bulimics, and both groups were higher on this scale than the NE group. In relation to frequency of depression (four point scale), 55% of the BPs, 28.6% of the BRs and only 5.6% of the NEs were "often" depressed. In addition, 20% of the BPs, 7.1% of the BRs, and 5.3% of the NEs had made suicidal gestures or attempts, while 45% of BPs, 64.3% of the BRs, and 21.1% of the NEs had had suicidal ideation.
In looking for expressions of anaclitic depression, Stuckey found that "anaclitic issues of dependency and helplessness do characterize the depressive experiences of normal weight bulimic women, but that severity of depression and introjective themes of guilt and self-criticism are more prominent factors in distinguishing bulimic purgers from non-purgers" (p. 87-88).

Results of interview data on depression found no significant differences between the three groups in relation to their descriptions of depression, what prompted depressive feelings, and how they dealt with these feelings. Stuckey, however, felt this might relate to the small number of subjects interviewed. She concluded that the type of depression found in normal weight bulimics did not resemble the anaclitic themes identified by Sugarman et al. (1981) in their anorectic patients, and in general more resembled an introjective kind of depression related to themes of "guilt, self-blame, feelings of inadequacy, and internalized aggression" (p. 111).

Since 1981, the number of studies attempting to identify the relationship between depression and eating disorders and various subgroups of eating disorders have multiplied. To examine mood states in bulimics, Johnson & Larson (1982) asked 15 non-anorectic bulimics to fill out mood checklists and self-report indices seven times a day for one week. Patients were asked to carry an electronic beeper which signalled randomly, every two hours. Results of this study showed that bulimics had significantly more mood fluctuations and dysphoric feelings marked by agitation and increased social withdrawal rather than lethargy, tiredness, or apathy. Johnson & Larson suggested a similarity between bulimia and addiction in relation to mood with bulimic behavior being "a
means of attempting to modulate the dysphoric and fluctuating mood states" (p. 349).

One of the few studies comparing restricting anorectics, bulimic anorectics, and normal-weight bulimics was published in 1983 by Norman & Herzog. This study compared MMPI profiles of 14 bulimics, 10 restricting anorectics, and 15 bulimic anorectics. The results of this study showed significant similarities and differences. Bulimics produced a 4-2-8 profile with scales 4 (Psychopathic Deviate), 2 (Depression), 7 (Psychoasthenia), and 8 (Schizophrenia) elevated above a T score of 70. Restricting anorectics showed a 2-8-7 profile with only scale 2 elevated above 70. Finally, bulimic anorectics had a 2-4-8 profile with several scores above 70 (all but scales 5-Masculinity-Femininity, 9-Hypomania, and 0-Social Introversion). Thus all three group showed significantly elevated depression scale scores, with bulimics being more depressed than restricting anorectics, and bulimic anorectics being most depressed.

In reviewing the literature on the relationship between affective disorders and eating disorders, Hatsukami, Mitchell & Eckert (1984) provided a comprehensive look at the current debate and overall findings. Their review clearly points to the high degree of depressive symptoms in both bulimics and anorectics. However, the research to date has not clarified "whether eating disorders are variants of mood disorders" (p. 362). Follow-up studies showing continued depression in some patients after remission of eating disorder symptoms support this conclusion, as do family incidence, drug studies, and neuroendocrine data. However, even these results can be interpreted as being due to environmental conditions, physical effects of purging, malnutrition, and severe weight loss, and the effects of chronic illness.
In their 1985 commentary, Altshuler & Weiner echo these ambiguous findings and their interpretations. In addition, they point to problems of overlapping diagnostic criteria for affective and eating disorders (i.e. early morning wakening, weight loss, decreased concentration, lower energy level, and poor appetite) which may be more reflective of starvation and purging side effects. They propose that these commonalities may not suggest similar disorders, but rather reflect "nonspecific symptoms of illness" (p. 329). The response to anti-depressants are also challenged as evidence for affective illness in eating disorders as other disorders are also known to respond to anti-depressants (i.e. panic disorders, narcolepsy, enuresis). In examining family studies, these authors echo Gershon et al (1983) and propose there may be "a familial factor for anorexia superimposed on familial tendency to affective illness" (p. 331).

In summary, much of the literature does indeed support the hypothesis of a relationship between eating disorders and depression, at least for a subgroup of individuals. This may be particularly true for bulimic anorectics, although these findings remain discrepant. One of the most common conclusions voiced is that depression in eating disorders does not typically include vegetative symptoms. What does characterize these patients' depression are symptoms of dysphoria, mood fluctuations, agitation, suicidal ideation, social withdrawal, apathy, lack of concentration, feelings of helplessness, inferiority, guilt, self-criticism, strong dependency needs, emptiness, boredom, and hypersensitivity to loss and separation.

Recent studies suggest there may be some differences in the kind of depression experienced among eating disordered subgroups. Studies
examining the specific differences in depression profiles among eating disordered subgroups remain meager and it remains unclear as to which specific depressive symptoms distinguish restricting anorectics, bulimic anorectics, and normal weight bulimics.

Personality Features in Eating Disorders

Psychodynamic Conceptualizations of Eating Disorders

While eating disorder subgroups have been considered both diagnostic entities and continuum disorders, many authors believe that specific personality deficits may both characterize and differentiate anorectics and bulimics. From the psychodynamic perspective, a theoretical understanding of the etiology of specific syndromes and symptom clusters is essential to successful treatment. The purpose of this section is to provide the reader with the psychodynamic conceptualizations of both anorexia and bulimia as well as the research which has attempted to operationalize these theoretical constructs.

Classical Psychoanalytic Theory. From a classical psychoanalytic perspective, anorexia develops out of fears of oral impregnation where sexual and aggressive impulses are cathexed to hunger (Bruch, 1982). Anorexia is believed to occur in "adolescents who are unable to meet the demands of mature genitality" resulting in a regression, "to a primitive level in which oral gratification is associated with sexual pleasure and fertility" (Bemis, 1978, p. 600). Support for this theory arises from anorectic symptoms such as food refusal, amenorrhea, and lowered sex drive.

Basically, early theories of anorexia were based on classical drive-conflict models. From this perspective, anorexia is seen as a
defense against oral impregnation fears and fantasies. As a result, regression occurs to a pre-genital level involving "conflict around primitive sadistic and cannibalistic oral fantasies" (Wilson, Hogan, & Mintz, 1983, p. 115). In general, anorexia is seen as a neurotic disturbance (Fenichel, 1945; Sperling, 1978; Thomae, 1967). More recently, however, psychoanalytic theorists have noted that eating disorders may also occur in pre-genital disorders (i.e. borderline, depressive, and hysterical characters) (Wilson et al, 1983). Overall, these theorists believe that anorectic symptoms act as defensive tactics to "deny and avoid typical, but intense oedipal conflicts" (Wilson et al, 1983, p. 127).

Benedek (1936) was one of the earliest of the analysts to write on anorexia and bulimia in her now classic paper entitled "Morbid Cravings". In this paper she describes the analysis of two bulimic women. She proposes that a poor maternal identification grows out of anxiety in the mother-daughter dyad. This then underlies the regression in these patients where aggressive impulses are released in binge eating. With this release, the superego turns on the ego leading to guilty and remorseful feelings over eating and resulting in a need for food deprivation and self starvation. Food becomes symbolic of the maternal figure, a loved and hated object.

Sylvester (1945) reported on the analysis of a four year old purging bulimic female. The focus in this treatment was on unconscious rage toward the mother for deprivation and abandonment. In this case, binge eating was seen as an attempt to regress to a dependent state to avoid aggressive impulses and resulting in melancholia. In this paper, self-induced vomiting was seen as permitting both expression of and punish-
ment for hostile feelings.

For the most part, current psychodynamic theorists have abandoned the classical perspective on the etiology of eating disorders. While in some cases, eating disorders may reflect more classical oedipal conflicts, most now view the etiology as having pre-genital roots. Present day psychodynamic thinking concentrates on ego deficits, self deficits, and impaired object relations development.

**Ego Deficits.** Among psychodynamic theorists, most seem to agree that ego deficits may be a distinct problem in both anorexia and bulimia (Bruch, 1973; Masterson, 1977; Selvini Palazzoli, 1978; Sours, 1974). Intertwined with ego deficits are interpersonal difficulties and deficits in the mother-child relationship. Hilda Bruch was one of the earlier theorists to propose that anorectics display severe ego weaknesses and interpersonal problems. She credits Meng (1944) as one of the earliest psychoanalysts to conceptualize and focus on structural deficits in the ego. His view grew out of his observations that regression in anorexia was more severe than would be seen in neurotics and seemed closer to psychotic regression. He observed that the ego in neurosis remained intact and adaptive while symptoms expressed the internal conflict. However in psychosis, "it is the ego that is diseased in its primary structure, even though external factors may play a role in the development of the disorder" (1973, p. 218). According to Bruch, Meng sees, "the changes in the ego as the essence of the illness, if only in its lowered resistance against being used" (p. 218).

Bruch's work with anorectic patients led her to hypothesize three kinds of ego disturbances: (1) body image distortion, (2) perceptual and cognitive disturbances, and (3) disturbances in feelings of effective-
ness. These three kinds of ego deficits manifest as self-induced starvation, fear of weight gain, denial of thinness, confused perceptions of internal states (i.e. hunger, sex drive, fatigue), a "paralyzing sense of ineffectiveness", and a lack of autonomy and initiative (p. 254).

Other authors have proposed that the outgrowth of these ego deficits are that anorectics develop a, "compliant, inhibited, conformist ego structure" (Swift, Camp, Bushnele, Bargman, 1984, p. 73). With the onset of adolescence, this brittle ego structure becomes overly stressed by the press for greater autonomy and self-assertion, resulting in a breakdown in ego functioning. Bruch believes these ego weaknesses evolve out of, "chronically disturbed mother-child interactions" (1973, p. 19). Ego deficits develop out of the anorectics' inability to become autonomous because of the mother's chronic intrusiveness and domination. The intrusive and demanding mother of the anorectic promotes the development of a false self characterized by pseudo maturity as a means of defending against this intrusion (Swift & Stern, 1982).

An Object Relations Perspective. The majority of psychodynamic theorists seem to view eating disorders from an object relations perspective which incorporates ego deficit models. These theorists perceive the mother-child dyad as the psychological base from which eating disorders can evolve. Typically, object relations theories of eating disorders use Mahler's four stage developmental model. In this model, the infant enters the world in an 'autistic' state, moves to 'symbiosis', to 'separation-individuation', and then 'on the way to object constancy'.

In the autistic stage, the infant is unable to differentiate itself from others and exists in a somewhat amorphous, hallucinatory
state. As the infant develops, he gradually moves into the symbiotic phase where the infant and its mother are fused, but others are recognized as outside of this dyadic unit. With optimal gratification and frustration of needs, the infant begins to be able to differentiate itself from the mother and to see the mother as a separate object. This marks the first subphase of the separation-individuation phase called 'differentiation'. During the next subphase, practicing, the growing toddler practices separating from the mother both motorically and emotionally. At this point the child begins to experience mother as separate from himself but the mother and the self are seen as all-good or all-bad. The good and bad parts of the self and others are not yet incorporated internally in an integrated manner.

During the final substage of the separation-individuation phase, called the rapprochement substage, separation and individuation issues are consolidated. If this stage is successfully completed, the child becomes gradually able to tolerate ambiguities and is able to integrate good and bad self and object representations and is ready to move on the way to object constancy.

When object constancy has been obtained, the child has formed complex internal representations of parental figures and is able to maintain the internal representation of the good object and self during times of instability, and physical and emotional distance from the mother. The child no longer needs the mother to be constantly present and available as he carries with him an internal representation of her.

Problems in personality organization in the adolescent and the adult, according to object relations theory, is related back to these developmental stages. It is believed that psychotic disorders arise
out of deficits occurring in the autistic-symbiotic phases of development, while borderline personality disorders are related to problems in the early substages of the separation-individuation process. Narcissistic and other character disorders represent problems in the later stages of the separation-individuation and the on the way to object constancy phases. Neurotic disorders are assumed to develop out of problems occurring once object constancy has been reached.

This developmental model of object relations focuses on the relationship between the child and the primary object (usually the mother). It is assumed that the child enters the world with a certain biological make-up which may pre-dispose him to specific psychological problems. This also influences the way in which people respond and interact with him. Biological, environmental, and interpersonal factors are all believed to influence the child's psychological development. In addition, this theory also takes into account the fact that an infant and his mother may be poorly matched in dispositions which may lead to difficulty in their interactions. Thus, problems at any one stage may evolve out of biological vulnerabilities, environmental stresses, poor emotional matching, and/or inadequate parenting.

In considering the etiology of eating disorders from an object relations perspective, most professionals believe both anorectics and bulimics have problems traceable to the separation-individuation phase. Difficulties in the child-mother dyad at this phase may vary in relation to the degree of problems, and the greater the difficulty the greater is the level of impairment. According to these theorists, eating disorders surface during adolescence because at this stage separation and individuation issues re-emerge along with oedipal issues. Both need to be
reworked during this time for personality consolidation to take place. Thus, the adolescent who has not successfully resolved these issues initially is ill equipped to re-work them in adolescence.

Guiora (1967) was among the earlier professionals to publish from an object relations perspective on anorexia and bulimia. He used the term 'dysorexia' to describe both disorders as he saw them as variations of the same syndrome. He proposed that dysorexia was the result of, "early deprivation in the mother-child relation that finds its expression in food intake" (p. 392). Because of this deprivation, the child becomes orally fixated with a sadomasochistic orientation. Guiora identified primitive rage and egocentricity as leading to poor object relations. Because of the child's hostility, maternal identification does not take place, leading to gender confusion. Along with these difficulties, "permanent lesion in ego structure" occurs resulting in a, "great concern over the patient's body figure which, as the concrete embodiment of the ego, will be a constant source of concern and anxiety" (p. 392). The adolescent who is poorly equipped to deal with the stress of puberty then becomes symptomatic.

Guiora speculates that greater ego weakness leads to poorer controls and results in bulimia which is a combined expression of sadism and aggression. If ego deficits are less severe, control is greater, resulting in a more masochistic stance where aggression is introjected in the form of anorexia. Thus, in bulimics, "the patient will eat the "others"" and in anorexia, "the patient will eat herself" (p. 392).

In 1974, Sours published his theoretical understanding of anorexia. He provided a detailed account of impaired mother-child relations and the resulting ego deficits, from a Mahlerian framework. Over-
all, he considers anorexia as a reflection of, "ineffective ego structure, instinctual fixation and infantile object dependency" and points to longstanding impairment in object relations and expression of affect (p. 570).

Sours describes the anorectic's mother as intrusive, controlling, and omnipotent which greatly interferes with the child's ability to progress through the separation-individuation phase of development. Sours point to the idealized developmental histories often given by these mothers where the patient is described as having been the perfect infant and child. Details of these histories reveal that the child often had no transitional objects, lacked age appropriate aggression as a toddler in the practicing subphase, and showed no signs of oppositionality and negativism during the rapprochement subphase. It appears that since infancy the, "mother narcissistically uses the child to maintain her grandiose self, self-esteem and sense of safety" (p. 572). In describing the phallic-oedipal phase, oedipal conflicts are strikingly absent and the anorectic's father is often described as absent or only minimally involved.

With the onset of puberty and increased instinctual and affective drives, the regressive pull becomes overwhelming. The anorectic fights the regression and, "refuses to eat in an attempt to retain the mother without total loss of ego boundaries of self-non-self" (p. 572). Sours sees ego regression overriding drive regression, "because of instinctual fixation and unresolved infantile object dependency and failure to achieve autonomy" (p. 572). Because of these problems, the anorectic as an adolescent cannot, "experience ego and drive regression without fear of ego merger and loss of self" (p. 572).
Sours sees bulimic anorectics as less disturbed than restricting anorectics. He comments that these patients, "regressively shrink from sexual feelings and fantasies to an oral-aggressive position where cannibalistic fantasies and incorporative wishes give rise to fear of destruction of the maternal object" (p. 573). Unlike restricting anorectics, bulimic anorectics are not threatened with total loss of ego and self boundaries. Sours points out that while historically these mothers are also controlling and intrusive, the child is allowed some degree of separation and autonomy. In addition, the father during oedipal and latency phases, is more involved with the child. Consequently, Sours believes that the bulimic anorectic has been able to achieve some degree of autonomy and identity.

In her book *Self-Starvation* (1978), Selvini Palazzoli elaborates on her earlier (1963) descriptions of the etiology of anorexia from an object relations perspective. In her model, based on Fairbairn's theories, she relates anorexia to the, "incorporation of the negative aspects of the primary object, with the ensuing repression and defense against the return of that object to consciousness" (p. 84). She sees anorexia as a pathological body experience not related to cannibalistic impulse repression as posited by Kleinian theory. The body in anorexia has instead, "become a threatening force that must be held in check rather than destroyed" (p. 86). The body is seen as split off from the ego and is equated with the negative maternal introject. As such, "the body is experienced as having all the features of the primary object as it was perceived in a situation of oral helplessness: all-powerful, indestructable, self-sufficient, growing and threatening" (p. 87). Out of this grows the all pervasive feelings of helplessness in the face of
Palazzoli describes the anorectic's mother as an, "aggressively overprotective and unresponsive woman, and as such incapable of considering her daughter as a person in her own right" (p. 88). The parents' inadequacies result in "ego depression" which is described as a, "transient sense of unreality; boredom; the feelings of being different from others...; a sense of isolation, and an obscure feeling of helplessness and uselessness" (p. 89). Anorexia acts to defend against both regression to a depressive and a paranoid position. Her body is experienced as "half-way between the non-I and the bad I, is both alien and her own, persecutor and persecuted, a destructive non-self invading the self" (p. 93).

In 1979, Masterson provided an elaboration on the relationship between borderline personality disorders and anorexia. He too proposes that most anorexia results from a "developmental arrest at the symbiotic or separation-individuation phase" where loss of self or the object is feared (p. 345). However, he also feels that anorexia can occur at higher more neurotic levels where the conflict is related to oral impregnation wishes and fears.

In the majority of cases, anorexia is viewed as a coping strategy for defusing anxiety about object loss. Emotional and physical maturation are arrested, and hostile tension discharged toward the mother. Anorexia is seen as adaptive as it both brings the mother closer as well as provides a means of expression of anger at the mother. Feelings of helplessness, dependency longings and rage, all point to deficits in the separation-individuation phase where affect is invested in the primary object and the maintenance of supplies. Anger results at the loss of the omnipotent object.
the self in this attempt.

In the Sugarman, Quinlan & Devenis (1981) article discussed in the prior section, the authors present the relationship between ego deficits, impaired object relations, and family systems and how this corresponds to the anorectic's predisposition to anaclitic depression. Basically, they too point to problems in Mahler's separation-individuation stage, and more specifically to the practicing subphase of development.

The parental interactions are described as underinvolved, or overinvolved with lack of appropriate maintenance of ego boundaries. Because of the mother's (in most cases) inability to promote separation and autonomous development, self-other boundaries do not consolidate. Sugarman et al state that "such a developmental arrest leaves the child cognitively fixated at a level of sensorimotor self and object representation (Blatt, 1974) where in the object can be internalized only as part of an action sequence at the moment of need satisfaction" (p. 46). Thus internal issues are acted out in a concrete manner through the body. The lack of object constancy capacity then predisposes the anorectic to anaclitic depression.

Sugarman et al (1981) propose that self-induced vomiting in the anorectic is a concrete way of both introjecting and then rejecting the maternal object and provides a means of protecting self-other boundaries against fragmentation. In relation to the family, these authors propose that the family structure is enmeshed resulting in "internalization of poorly differentiated self and object representations" and inadequate ego boundary formation (p. 51).

In relation to feeding, the mother is seen as promoting a lack of
connection between hunger and food intake where either eating is associated with overindulgence or over emphasized in importance. This then affects the early mother-child relationship and oral fixations result. At the toddler stage, either dependency is overly encouraged or independence is not fostered. Thus, during the practicing subphase, the end result is an over emphasis on "control, perfection, and a fear to engage in normal toddler experience" (p. 52).

These authors also see anorexia as an adaptive mechanism to prevent boundary collapse, anaclitic depression and regression to a symbiotic state. Thus, extreme thinness acts to preserve boundaries and "accentuates their own body image, making it significantly and concretely different from others" (p. 57). Hyperactivity is also seen as a way to preserve ego boundaries.

In an attempt to identify the psychodynamic heterogeneity within anorexia, Swift and Stern (1982) published a paper outlining three levels of personality organization in anorexia. They agree with the object relation theorists in that anorexia seems to grow out of deficits in the mother-child relationship during the separation-individuation phase of psychological development. In order to explain varying degrees of psychopathology they point to five variables: (1) degree of enmeshment of the family structure, (2) level of available defense mechanisms, (3) degree of self development, especially self esteem, (4) level of object relations, and (5) degree and type of character structure.

Within the group of classical anorectics (including both restricting and bulimic anorectics) patients are divided into three levels: (1) borderline, (2) empty and unstructured (false self personalities), and (3) conflicted and identity confused. They propose that the degree
of deficits in the separation-individuation phase determines the level of personality organization. Thus, borderline anorectics have more severe deficits, while conflicted anorectics have less severe deficits in this phase.

In borderline anorectics, the symptomatology serves as a "restitutive attempt on the part of a frail and threatened ego to fend off fragmentation of the self" (p. 25). In the empty, unstructured anorectic, the symptom constellation serves to "establish some sense of competence and positive self-regard" (p. 27). In the emotionally conflicted and identity-confused anorectic, their "psychic structures (id, ego, and superego) are reasonably well developed and they experience painful conflict between their impulse life, especially aggression, and a repressive super-ego" (p. 30). In relation to identity issues therapy focuses on, "sorting out contradictory self and object representations based on early experience and identifications" (p. 30).

The majority of theoretical papers on eating disorders have focused on anorexia. However, in 1982, Sugarman & Kurash published a theoretical paper on the body as a transitional object in bulimia. As such, they are proposing a more primitive level of ego boundary disturbance than proposed by Palazzoli's view of the body in anorexia as a persecutory object. They suggest that the "failure to adequately separate both physically and cognitively from the maternal object during the practicing subphase leads to a narcissistic fixation on one's own body at the expense of reaching out to other objects in the wider world, through the use of external transitional objects" (p. 58).

They point to problems in making a smooth transition from the differentiation to the practicing subphase where self and other boundaries
gradually consolidate through the use of the transitional object. Within this model, Sugarman & Kurash propose that the body is the "first transitional object, a precursor of the later external transitional object" (p. 59). At this stage the child has not completely internalized the maternal object and has not reached object constancy. The concreteness and sensorimotor nature of this stage suggests that in bulimics "food is not the issue; rather it is the bodily action of eating which is essential in regaining a fleeting experience of mother. The dread of fusion and other psychodynamics mobilized by the experience of the symbiotic mother, often lead to vomiting another bodily action" (p. 61).

During adolescence when the body undergoes rapid pubertal changes, issues related to earlier body boundary development are re-evoked. Thus, in the bulimic adolescent, deficits in this earlier stage results in strong regressive urges toward symbiotic merger with the maternal figure. As a result "the ability to utilize abstract transitional phenomena is precluded; instead the body becomes the arena for the concrete interplay of separation issues" (p. 61). The end result is that in bulimia, the body is used as a transitional object in an effort to both evoke the internal representation of the good maternal introject and repudiate the bad introject.

of the body as a transitional object in bulimia. Goodsitt proposes that eating disorder symptoms are better conceptualized as deficits in the capacity to organize and regulate the self and that the body functions not as a transitional object but as an autoerotic mechanism.

Goodsitt defines autoeroticism as an "internal state of stimulation characterized by a pressured, driven demand for discharge and satisfied by the individual" (p. 51). He compares the autoerotic activity of thumbsucking to a transitional object such as the blanket. He sees thumbsucking as a concrete, nonsymbolic activity which leads to drive-discharge whereas a transitional object such as the blanket occupies "an area of experience between idiosyncratic creativity and acceptance of reality" (p. 52).

Goodsitt likens Winnicott's concept of the transitional object to Kohut's concept of the self-object. The transitional object has the capacity to soothe the infant in the mother's absence and is perceived by the child as both part of the body and external to the body. Once object constancy has been reached, the child has internalized these functions and is then "able to provide his own tension-regulation, self-esteem regulation, and his sense of self remains cohesive" (p. 53).

Goodsitt proposes that the body cannot be conceptualized as a transitional object because by definition a transitional object must be external to the body. Rather, it functions as an autoerotic phenomenon and is used for self-esteem and tension regulation. In eating disorders self-esteem is regulated externally through others and through the body, and stimulation is sought to "drown out anguished feelings of deadness, emptiness, boredom, aimlessness, and the tensions experienced concomitant with these feelings" (p. 54). Goodsitt does not see the
eating disordered symptoms as providing self-soothing and psychological growth as does the transitional object, rather they provide a means for "tension discharge but not narcissistic equilibrium manifest as a sense of well-being or security" (p. 56).

Goodsitt concludes his paper by stating that anorexia and bulimia arise from "failures in empathic mirroring, idealizing (Kohut, 1971) and the appropriate transitional experiences during childhood that lead to the internalization of self-soothing and self-enliving" (p. 57).

In a more recent paper, Goodsitt (1984) presented the development of psychodynamic theories concerning eating disorders from classical to object relations to self psychology. Expanding on his 1983 article, he elaborates on his view of the problems with object relations theorist such as Selvini Palazzoli, Masterson, Sours, and Sugarman & Kurash. While he too believes that developmental weaknesses in the separation-individuation stage lead to the development of eating disorders, he differs in his understanding of the origin of these weaknesses.

Goodsitt states that object relations theorists overemphasize deviant and distorted internal representations and ego deficits and the capacity for object constancy in the etiology of eating disorders. He proposes that the deficit is rather a deficit in self-organization and tension regulation. The inability to master the separation-individuation stage according to object relations theorists, is the result of distorted and inadequately internalized object and self representations. This then prevents the child from being able to fully internalize an integrated maternal image and thus object constancy is not obtained.

For Goodsitt, the incapacity to master the separation-individuation phase results from the lack of internalization of the regulating
functions provided by the mother. These functions include the "capacity
to provide one's own cohesiveness, soothing, vitalization, narcissistic
equilibrium... tension regulation, and self-esteem regulation" (p. 61).
Thus, eating disordered patients do not progress from a self-object
level. As a result when the self-object is unavailable or inadequate,
the individual feels "helpless, ineffective, overwhelmed, unworthy,
unreal, incomplete, or empty" (p. 62). These individuals must depend
then on others for their sense of self and well-being.

To summarize the current psychodynamic thinking on eating disor­
ders, classical theories seem to have fallen out out favor, being
replaced by object relations, ego deficit, and self psychological mod­
els. The overwhelming consensus seems to be that, while eating disor­
dered individuals are a heterogeneous group existing on a continuum of
disturbance, most anorectics and bulimics seem to have common problems
traceable to the separation-individuation phase of psychological devel­
opment. These deficits may result in borderline, narcissistic, and
other levels of character organization depending on the pervasiveness of
the problem. Thus, most current psychodynamic theorists seem to agree
that inadequate parenting around the separation-individuation subphases
best explains the original trauma predisposing individuals to develop an
eating disorder.

Where professionals seem to differ is in their conceptualization
of the specific problem in the mother-child relationship. Object rela­
tions theorists suggest that deficits occur out of distorted and deviant
internal representations which results in an incapacity to integrate
ambiguous aspects of the self and others, thus interfering with the
capacity for object constancy. On the other hand, self theorists point
to lack of internalization of self regulating functions from the maternal figure, which in turn leaves the individual reliant on external self-objects to regulate their self esteem and tension.

In reviewing the subtle differences within different psychodynamic theories, the boundaries blur. Most likely this is because the psychological development of the individual is best understood as a combination of all these lines of development, with deficits in any one specific area impacting other areas of growth. In the end there cannot be a clear distinction of where the primary disturbance lies. Therefore, it seems apparent that future psychodynamic thinking will need to focus on a model which integrates ego, object relations, and self psychological development along with more traditional theories of psychosexual development.

In relation to the psychodynamic literature on eating disorders, there seems to be a lack of understanding of different kinds of eating disorders. Some theorists believe that bulimic anorectics are more disturbed than restricting anorectics, while others believe the opposite to be the case. Presently, it remains unclear as to where normal weight bulimics fit into the continuum. In addition, few have examined differences between purging and non-purging normal weight bulimics from a theoretical perspective. Future theoretical work will need to focus on clarifying these differences and providing an integrated psychodynamic framework for conceptualizing the eating disorders continuum.

Empirically Based Studies from a Psychodynamic Framework

Recent advances in psychodynamic work have included attempts to operationalize the theoretical constructs outlined in the previous section. This section will present relevant empirical studies on eating
disorders which examine psychodynamic constructs such as ego boundary disturbances, impaired object relations, ego deficits, thought disorder, and level of personality organization.

In 1978, Wagner & Wagner published a study comparing the Rorschach responses of three anorectics (two females and one male), two of whom were purging anorectics. In comparing their summary profiles, these authors found many similarities. While their number of subjects was obviously too small for statistical analyses, they concluded that all three subjects were "labile, somewhat anxious and orally fixated" (p. 427). While their reality testing was adequate, their defenses were brittle and rigid. Overall, these authors felt that these anorectics' profiles resembled hysterical rather than obsessive-compulsive or psychotic personalities.

In 1980, Strober published on personality characteristics in non-chronic anorectics. In this study, he compared 22 adolescent female anorectics (eight of whom were bulimic) to 22 normal weight adolescent patients with affective disorders, and 22 with conduct or personality disorders. In order to compare these three groups several self-report instruments were used: Marlow-Crowne Desirability Scale, Eysenck Personality Inventory, Leyton Obsessional Inventory, Hopkins Symptom Checklist, and the California Psychological Inventory. Anorectics were tested during the second week of hospitalization and retested six months later when patients had reached within four percent of their ideal body weight.

Results of this study showed that anorectics were more similar to the affective disordered group than to the personality disordered group. However, there were also significant differences between anorectics and
the other two groups on several variables. Overall, anorectics had "more symptom traits of obsessionality, a higher propensity for social approval seeking, and...lower social presence, psychological mindedness and flexibility, in conjunction with higher responsibility, maintenance of self-control, conformance and intellectual efficiency" (p. 356).

When bulimic and restricting anorectics were compared, these two subgroups appeared more similar than divergent. However, bulimics reported lowered self-control, higher sociability, and psychological mindedness, and were more adaptive and flexible in their thinking and social interaction. When anorectics were retested at weight gain, results showed that the anorectic personality remained essentially unchanged, while introversion, depression and obsessionality decreased.

Strober concluded that "the prototype of the young female anorectic is one who is markedly obsessionist in character makeup; introverted and socially insecure; self-denying, deferential and given to overcompliant adaptation; prone to self-abasement with limited spontaneity and self-directed autonomy and overly formalistic and stereotyped thinking despite being industrious, planful and intellectually efficient" (p. 358)

Following this 1980 investigation, Strober published a second article (1981a) which more specifically examined personality organization in nonchronic adolescent female anorectics. In this study, 50 anorectics were compared to a group of 36 affective disordered and 14 anxiety disordered patients, and a group of 50 conduct disordered patients on the Cattell High School Personality Questionnaire (HSPQ). The results of this study also showed anorectics to be a distinctly different group compared to the other two groups. Overall, "anorectics were
characterized by significantly greater conformity, neurotic anxieties, control of emotionality, and stimulus avoidance" (p. 285).

The findings of this study generally support the qualitative descriptions given in the literature. Strober speculates that anorectic symptoms develop in adolescence because these individuals lack "the plasticity of psychological functioning and adaptive controls necessary to engage constructively in these developmental tasks and progress toward identity formation" (p. 293). Strober suggests that his empirical findings support theoretical hypotheses of developmental deficits related to separation, autonomy, and identity formation.

Strober published a third study in 1981 with Goldenberg on ego boundary disturbances in the Rorschach responses of adolescent female anorectics (n = 20), and depressed adolescent female patients (n = 20). Rorschach responses were scored for Affect Elaboration, Overspecificity, Incongruous-Fabulized Combinations, and Barrier and Penetration. The results of this study showed that compared to controls, anorectics showed "significantly more intrusion of both affective and descriptive content...a loss of internal-external boundaries and showed a trend towards more deviant conceptual boundary organization" (p. 437). Compared to restricting anorectics, purging anorectics showed significantly more ego boundary disturbances. In general, anorectics did not show significantly higher Penetration scores, but did have significantly higher Barrier scores. When retested six months later after weight gain, there were no significant changes in scores.

These authors suggest that "heightened Barrier in the anorexic is a restitutive phenomenon that serves to compensate for boundary instability" and "can reflect a rigid overdefinition of boundaries to buffer
intrusiveness or domination by others" (p. 437). Strober and Goldenberg concluded that because these scores do not change with weight gain that the ego boundary disturbances seen in anorectics are not attributable to weight loss or transient psychopathology. They propose rather that these deficits reflect underlying problems in personality organization.

Another study using the Rorschach along with diagnostic interviews was conducted by Bram, Eger, & Halmi (1982). This study was conducted with only six anorectics, but the results support previous and present research findings. According to DSM III criteria for various personality disorders, these authors diagnosed two patients as having Borderline disorders, two as having none, one with a Schizoid disorder, and one with a Histrionic Personality Disorder. Based on the Diagnostic Interview for Borderlines (DIB) they found that three patients qualified for a Borderline diagnosis. These patients were those diagnosed as Borderline and Schizoid using the DSM III.

According to Bram et al, the Johnston-Holzman Index on the WISC-R and WAIS-R showed anorectics as having evidence of thought disorder consisting of peculiar "verbalizations", "looseness", "confusion", and "inappropriate distance". When scored for the Thought Disorder Index (TDI) on the Rorschach, they found that all six patients had peculiar verbalizations, and that five of the six patients evidenced fluidity, fabulized combinations, confabulizations, and autistic logic. In addition, these anorectics had higher than average (.93) F percent scores, low F+ percent scores (.62), and few color or human movement responses.

Based on these findings, the authors concluded that anorexia can occur over a range of personality disorders and organization, but that purging anorectics are more frequently diagnosible as Borderline.
Their patients "seem to be either over-controlling of affect or have what appears to be impulsive outbreaks of affect that disrupt their defensive efforts to remain emotionally controlled" (p. 72). However, conclusions from this study are limited given the small number of subjects tested.

In 1982, Small, Teagno, Madero, Gross, & Ebert published a study comparing the WAIS and Rorschach responses of schizophrenics \( n = 18 \) and anorectics \( n = 27 \). On the WAIS, it was found that anorectics had significantly higher IQ scores, with anorectics scoring higher than schizophrenics on all subscales but Vocabularity and Similarities. Results of the Rorschach showed that anorectics produced significantly more Whole responses, combined shading, an achromatic color responses, indicating "greater awareness of affectional and emotional needs and dysphoric affect, as well as better integrated thinking" (p. 54). However, anorectics and schizophrenics received similar Delta Index scores (pathological thinking) in the disturbed range. These authors concluded that the anorectics' pattern of intact thinking on structured tests and disturbed thinking on projective tests corresponds to a typical Borderline Personality pattern.

Another study which examined ego boundary deficits in anorectics was published in 1982 by Sugarman, Quinlan, & Devenis. These researchers administered Rorschachs to 12 anorectics, and 15 control patients (non-eating disordered, psychotic or Borderline diagnoses). Comparisons were made between these two groups on Boundary Disruption (Contam, Fabcorn, and Comfab scores), Human Representation (Blatt, Brenneis, Schimek, & Glick, 1976), Affect Elaboration (Quinlan, Harrow, Tucker, & Carlson, 1972), and Drive-Dominated Ideation (Holt, 1977).
Results of this study showed that anorectics had significantly more contamination scores, but that no other scores were elevated. These findings suggest that anorectics' problems are related to ego boundary disturbance rather than level of object relatedness. Since contamination scores are believed to reflect "overt manifestations of self-other boundary loss" these authors concluded that, "much anorectic symptomatology can be understood as a desperate defense against such a regression for those anorectics who manifest contamination responses" (p. 459). Thus in these cases, anorexia may defend against regression to a psychotic level. Their findings furthermore do not support models of psychosexual conflicts as underlying anorexia. Sugarman et al concluded by stating that anorectic symptoms may reflect "attempts to become autonomous through a desperate and extreme maintenance of the boundaries between themselves and others, inner and outer" (p. 460).

In 1983, Kaufer & Katz published a study comparing the Rorschach responses of anorectic (n = 20) and nonanorectic (n = 20) females (undergraduate volunteers with no histories of psychiatric problems or eating disorders). Rorschach responses were scored and analyzed for deviant verbalizations (Confab, Contam, and Fabcom responses), deviant content (aggressive, violent, destructive and sexual images), as well as standard scoring methods.

Results of this study showed that anorectics had significantly more deviant verbalizations, indicating a higher degree of ego boundary disturbance. In addition, anorectics reported significantly more "sex" and "gory/damage" responses which the literature suggests is "representative of a high level of disturbance as evidenced by the breakthrough of "primary process" material" (p. 71). No significant differences
between these two groups were found in the other standard scoring categories (i.e. movement, color, W, D, or number of responses").

The authors concluded that the results of this study may suggest that anorexia is a "disturbance of virtually psychotic proportions" (p. 72). However, they also noted that responses within the anorectic group were very heterogeneous with subjects at both ends of the spectrum. Degree of disturbance in this study did not appear related to presence or absence of bulimia. These authors concluded that anorexia may exist on a continuum of personality organization but that "serious and pervasive developmental ego disturbances may characterize a large percentage of the women affected with anorexia nervosa" (p. 73).

In an attempt to examine ego development in anorectics, Swift, Camp, Bushnele, & Bargman (1984) analyzed the Washington University Sentence Completion Test (WUSCT) of 29 anorectic inpatients. Loevinger's ego development hierarchy was used in this study. Results revealed that anorectics scored higher than predicted. Rather than scoring at the conformist level as suggested by the qualitative descriptions of ego deficits in anorexia, the mean score was at the next higher level, 'self-aware'. This level is the typical mean level for the American population. In addition, the distribution of the levels of anorectics closely resembled that of the normal population.

Swift et al explain these surprising findings by hypothesizing that "we are comparing two quite different constructs of ego development; the psychoanalytic, which underpins the clinical-psychodynamic view, and Loevinger's hierarchical-sequential-integrative model" (p. 77). These authors provide a Venn diagram to illustrate the two models. Common to both models of ego functioning are the "synthetic function", 


"interpersonal style", "impulse control", "thought processes", and "reality testing" (P. 78). However, included only in the Loevinger model is, "moral style", "cognitive style", while "adaptive capacity", "defenses", and "autonomous functions" are included only in the psychoanalytic model (p. 78).

In Loevinger's model, high levels of ego development do not preclude vulnerability to psychopathology, however she feels that the ego level will affect the type of psychopathology. Swift et al propose that future research should examine subtypes of eating disorders and attempt to link ego development scores at the various levels with severity and specific eating disorder symptoms in an effort to better understand the relationship between ego development and eating disorders.

Summary

While the empirically based research on personality organization in eating disorders has many problems, some consistent findings do exist. Consistent across several studies are the findings of ego deficits, particularly boundary difficulties, and suggestions of a possible connection between eating disorders and borderline personality characteristics. Restricting anorectics have been consistently described as more rigid and socially withdrawn while bulimic anorectics have been identified as more outgoing but with poorer impulse controls and ego boundaries. In addition, there appears to be a relationship between anorexia and thought disorder, and problems of affect regulation. Few empirical studies have supported a relationship between eating disorders and psychosis/schizophrenia.

In general, the majority of this research is suggestive of eating disorders existing on a continuum of personality organization, with
bulimic anorectics appearing more severely disturbed than either restricting anorectics or normal weight bulimics and a greater tendency for eating disordered individuals to have borderline personalities. However, the multitude of methodological problems and the scant research in this area make any conclusions concerning personality organization in eating disorders premature.

Small, in his 1984 review of psychodiagnostic testing in research on anorexia, provides an excellent summary of the problems with the literature in this area. Basically, he feels that objective tests have done little to enhance our theoretical conceptualization and treatment approaches as they merely describe specific personality traits. He proposes that projective tests can potentially be useful, but that studies to date have used too few subjects, and have many methodological weaknesses. In spite of these problems, however, he points out the consistent findings of ego deficits in anorexia.

It is also apparent from the research literature that future work needs to focus on examining subtypes of eating disorders in terms of ego functioning, object relations, body boundaries, and personality organization in general. Thus far, little if any research has been published on the personality organization in normal weight bulimics. While the literature suggests that these individuals may be higher functioning than anorectics, but more similar to bulimic anorectics, this needs to be examined from a psychodynamic perspective, both theoretically and empirically before conclusions can be drawn.
Research Problem and Hypotheses

The purpose of the present study is to compare three subgroups of eating disorders on several variables in an attempt to better understand differences in personality organization and in depressive experiences. Eating disordered individuals were divided into the following three subgroups in this study: Anorectics (restricting and bulimic anorectics), Bulimics (normal weight bulimics), and Weight-Preoccupied. Specifically, these three subgroups were compared in terms of depression profiles, social adjustment, ego boundaries, thought disorder, reality testing, and level of object representation.

Depression

In relation to depression, the research and clinical literature suggests that anorectics and bulimics are significantly more depressed than weight-preoccupied individuals, with bulimics appearing more depressed than anorectics. Discussions of specific depression profiles indicate that anorectics have generally poorer socialization, and that anaclitic and introjective themes tend to be more prominent for both anorectics and bulimics. Thus, it is hypothesized that bulimics overall, will be the most depressed followed by anorectics and then weight-preoccupied subjects. This hypothesis will be tested using the following dependent measures: DSM III depression diagnoses, EPQ depression frequency scale, and the MDI Total scores.

1. The Bulimic group will receive significantly more DSM III diagnoses of depression (Major Depressive Episode or Dysthymic Disorder) than will the Anorectic group, and the Weight-Preoccupied group will receive the least number of depression diagnoses. (BUL > AN > WP)
2. The Bulimic group will more frequently report depressive feelings on the EPQ depression frequency scale than will the Anorectic group, and the Anorectic group will be more frequently depressed than the Weight-Preoccupied group. (BUL > AN > WP)

The Bulimic group will score highest, followed by the Anorectic group, and the Weight-Preoccupied group will score the lowest on the Total MDI score. (BUL > AN > WP)

It is also hypothesized that there will be distinct depression profiles for the MDI scales that will differentiate the three groups:

1. The Anorectic group will score higher than the Bulimic group, and the Weight-Preoccupied group will score the lowest on Social Introversion. (AN > BUL > WP)

2. The Bulimic and Anorectic groups will score significantly higher than the Weight-Preoccupied group on Sad Mood, Guilt, and Learned Helplessness. (AN = BUL > WP)

3. The Bulimic group will score significantly higher than the Anorectic and Weight-Preoccupied groups on Irritibility and Instrumental Helplessness. (BUL > AN = WP)

**Social Adjustment**

Several studies have documented the significant social impairment in anorexia, and the comparatively better social adjustment of bulimic. Therefore, it was believed that in the present study anorectics would appear to be significantly more socially maladjusted. Furthermore, it was proposed that bulimics, while less impaired than anorectics, would appear more socially maladjusted than weight-preoccupied subjects. This hypothesis was tested in the present study using the Social Adjustment Scale.
1. The Anorectic group will score significantly higher than the Bulimic group, and the Bulimic group will score higher than the Weight-Preoccupied group on the Global SAS score and on Work, Social-Leisure, and Extended Family scale scores of the SAS. (AN > BUL > WP)

**Personality Organization**

The psychodynamic literature suggests significant weaknesses traceable to the separation-individuation phase of personality development for both anorectics and bulimics, with bulimic anorectics appearing to have a lower level of personality organization than restricting anorectics, and bulimics appearing to have a higher level of personality organization. To examine these theoretical issues, specific aspects of personality organization were selected that seem problematic areas for eating disordered individuals.

**Reality Testing.** It has been suggested that anorectics show poorer reality testing than bulimics, and that bulimics have poorer reality testing than normals. However, it is also believed that reality testing for eating disordered individuals is much more intact than it is for psychotic individuals. In the present study reality testing will be measured using the X+ percent score on the Rorschach.

1. On the Rorschach, the Anorectic group will receive significantly lower X+ percent scores than the Bulimic group, and the Bulimic group will receive lower scores than the Weight-Preoccupied group. (AN < BUL < WP)

**Body Boundaries.** In general, current research suggests that anorectics and bulimics have significantly poorer ego boundaries than weight-preoccupied individuals, with anorectics showing more evidence
of overly rigid body boundaries and bulimics showing more problems with overly permeable body boundaries. In the present study these hypotheses were tested using Fisher's Barrier and Penetration scoring systems for the Rorschach test.

1. The Anorectic group will receive significantly more Barrier scores on the Rorschach than the Bulimic group, and the Bulimic group will receive significantly more than the Weight-Preoccupied group. (AN > BUL > WP)

2. The Bulimics group will receive significantly more Penetration scores on the Rorschach than the Anorectic group, and the Anorectic group will receive more than the Weight-Preoccupied group. (BUL > AN > WP)

Thought Disorder. In relation to other ego boundary problems, it is believed that anorectics show more evidence of thought disorder than bulimics and that both anorectics and bulimics have significantly more thought disorder than weight-preoccupied individuals. In the present study this will be measured through the presence of deviant verbalizations representing boundary disruption (contamination, incongruous combination, confabulation, fabulized combination).

1. On the Rorschach test, the Anorectic group will receive a significantly higher weighted deviant verbalization score than the Bulimic group, and the Bulimic group's score will be higher than the Weight-Preoccupied group. (AN > BUL > WP)

Object Representation. Lastly, it has been proposed that anorectics are developmentally at a lower level of object representation than bulimics, and that both groups have more problems in this area than do weight-preoccupied individuals. In the present study this hypothesis
was tested using a system developed by Blatt for assessing human responses on the Rorschach.

1. On the Rorschach, the Anorectic group will receive a significantly lower Blatt Total OR score than the Bulimic group, and the Bulimic group will receive a lower score than the Weight-Preoccupied group. (AN < BUL < WP)
CHAPTER III

METHOD

Subjects

This study included a total of 45 subjects between the ages of 12 and 36. All subjects agreed to participate in this study voluntarily and informed consent was obtained from all subjects including parental consent for those subjects under the age of 18. Of the 45 subjects, 39 were female and 6 were male with 42 white, 2 black, and 1 oriental subject. There were 25 inpatients, 3 outpatients, and 17 nonpatient undergraduates in this sample.

Three groups of subjects were used in this study: Anorectic, Bulimic, and Weight-Preoccupied with 15 subjects in each group. Of the anorectics 12 were female and 3 were male; of the bulimics 13 were female and 2 were male; of the weight-preoccupied 14 were female and 1 was male. All of the subjects in the anorectic group were inpatients. In the bulimic group 10 subjects were inpatients, 3 were outpatients, and 2 were undergraduate volunteers. All Weight-Preoccupied subjects were undergraduate volunteers.

Subjects were recruited from Michael Reese Hospital and from Loyola University. Patients from Michael Reese Hospital were asked to participate in this study if they qualified for a diagnosis of anorexia nervosa or bulimia as outlined in the criteria listed below. Patients who were clearly psychotic or who had a history of severe brain damage or epilepsy were excluded from this study.
Subjects recruited from Loyola University were undergraduates in introductory psychology classes who qualified for one of three groups based on three self report questionnaires designed to identify persons with disturbed eating patterns (Eating Attitudes Test, Eating Disorders Inventory, Eating Problems Questionnaire). Students with identified disturbed eating patterns were then contacted and asked to participate in this study.

All subjects asked to participate in this study received individual screening interviews to determine group eligibility. Subjects were then assigned to one of the following three groups based on their eating disorder symptomatology and weight history if they were judged to meet group criteria.

Group I: Anorectics ('AN') (n = 15) (modified DSM III criteria)

1. Intense fear of becoming obese, which does not diminish as weight loss progresses.
2. Disturbance of body image.
3. Weight loss of at least 25% of original body weight or if under 18 years of age, weight loss from original body weight plus projected weight gain expected from growth charts may be combined to make the 25%.
4. Refusal to maintain body weight over a minimal normal weight for age and height.
5. No known physical illness that would account for the weight loss.
Group II: Bulimics ('BUL') (n = 15) (modified DSM III criteria)

1. No history of anorexia nervosa within the past year.

2. Bulimic episodes at least once weekly: (DSM III criteria)
   a) recurrent episodes of binge eating.
   b) at least three of the following:
      i) consumption of high-caloric, easily ingested food during a binge.
      ii) inconspicuous eating during a binge.
      iii) termination of such eating episodes by abdominal pain, sleep, social interruption.
      iv) repeated attempts to lose weight by severely restrictive diets.
      v) frequent weight fluctuations greater than ten pounds due to alternation of 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. (APA, 1980, p.70-71)

3. Purging at least once weekly either by self-induced vomiting and/or laxative abuse following bulimic episodes.

Group III: Weight-Preoccupied ('WP') (n = 15)

1. No history of anorexia nervosa or bulimia in the past year.

2. Weight not less than 75% and not greater than 125% of desirable weight for their height (Metropolitan Life Insurance Co.,1959/1979).

3. Eating Attitude Test score at or above 25.
4. Drive for Thinness scale score on the Eating Disorders Inventory at or above 12.

Materials

Group Criteria Measures

Eating Attitudes Test (EAT: Garner & Garfinkel, 1979). The EAT is a self-report inventory (40 items) designed to measure abnormal eating attitudes and behaviors. Responses are based on a six point Likert scale, and are scored 0, 1, 2, or 3 depending on the direction of the response.

The EAT items were initially selected based on the eating disorder literature and the final questionnaire items chosen based on their ability to correctly classify anorectic patients. In the validation sample anorectics received a mean of 58.9 (S.D. = 13.3) and normals received a mean score of 15.6 (S.D. = 5.3) with a validity correlation coefficient of .85 (p < .01).

In the present study, the EAT was used to identify college students who qualified for assignment to the WP group. In addition, EAT scores for anorectic and bulimic subjects were also collected so that mean scores could be reported and comparisons obtained among the three groups. Individuals who received a score at or above 25 were screened further to determine eligibility for the WP group. A cutoff score of 25 was chosen based on previous research which suggested this cutoff criteria be used to identify persons with disturbed eating patterns but who are not diagnosable as anorectic or bulimic (Thompson & Schwartz, 1982; Garfinkel & Garner, 1982). Previous research has shown that this group of individuals are similar to anorectics in that their eating behavior
and attitudes show weight and body image preoccupation (Garner, Garfinkel, Schwartz, & Thompson, 1980).

Eating Disorders Inventory (EDI: Garner, Olmsted, Polivy, 1983). The EDI is a 64 item self-report inventory with a six point, forced-choice Likert scale similar to the EAT. It was originally constructed to measure cognitive and behavioral features frequently identified in anorectic and bulimic individuals and consists of eight subscales: Drive for Thinness (DI), Bulimia (B), Body Dissatisfaction (BD), Ineffectiveness (I), Perfectionism (P), Interpersonal Distrust (ID), Interoceptive Awareness (IA) and Maturity Fears (MF).

The EDI items were selected initially based on clinical experience with anorectic patients and a review of the literature. Each of the eight retained subscales have reliability coefficients above .80 for anorectic samples and above .70 for normal female comparison samples. Mean scale scores are provided for anorectics, recovered anorectics, female comparison, and male comparison samples for each of the eight scales of the EDI.

In the present study the EDI was used to identify college students who qualified for assignment to the WP group. Individuals with a Drive for Thinness score at or above 12 were considered for assignment to this group. This cutoff score (mean score for restricting anorectics) was selected based on previous research indicating that a cutoff score equivalent to the anorexia nervosa patients'mean DT score on the EDI be used to identify weight-preoccupied individuals (Garner et al, 1983; Garner & Olmsted, 1984). The DI scale of the EDI contains items relating to "excessive concern with dieting, preoccupation with weight and entrenchment in an extreme pursuit of thinness...Items reflect both an
ardent wish to lose weight as well as a fear of weight gain" (Garner et al., 1983).

**Eating Problems Questionnaire** (EPQ: Stuckey, Lewis, Jacobs, Johnson & Lewis, 1980). The EPQ (55 items) was designed to identify symptomatology and behaviors commonly associated with anorexia and bulimia. The items on this questionnaire ask about specific symptoms corresponding to DSM III diagnoses of anorexia nervosa and bulimia and has been used successfully in previous research to identify eating disordered individuals (Johnson et al., 1981; Stuckey, 1981).

In the present study the EPQ was used along with intake diagnoses (for psychiatric patients) and weight histories to select and assign patients and college students who qualified for one of the three groups. Subjects selected for the study were then screened individually to determine their eligibility for the study.

**Dependent Measures**

**Multiscore Depression Inventory** (MDI: Berndt, Petzel, & Berndt, 1980). The MDI is a self-report inventory (118 items) with a true-false response format. It provides the following ten scale scores: Social Introversion (SI), Guilt (G), Cognitive Difficulty (CD), Pessimism (P), Irritability (I), Low Energy Level (EL), Low Self-Esteem (SE), Sad Mood (SM), Learned Helplessness (LH), Instrumental Helplessness (IH). It also includes a Total score which reflects the overall severity of the depression and includes normative scale scores.

The scales used in this inventory were constructed based on factor analysis and sequential item selection from a large pool of items (962) chosen from other depression inventories, and from a review of the literature. The MDI has been shown to have good internal and test-retest
reliability with a Full Scale reliability score of .96, and subscale reliabilities between .78 and .91. In addition, the MDI has been shown to significantly correlate with the Beck Depression Inventory (r = .60, p < .01) and the Depression Adjective Checklist (r = .77, p < .01).

The MDI was selected over other depression inventories for this study because of its capacity to provide subscale information along with a measure of overall depression severity. This instrument provided information concerning specific characteristics of depression in eating disorders and depressive profiles differentiating the three groups used in this study.

Social Adjustment Scale (SAS: Weissman & Bothwell, 1976). The SAS is a 42 item, multiple choice questionnaire which provides information on social adjustment and functioning in the areas of work (job, housewife, or student), social-leisure activities (free time, dating, friends), family interactions and relationships (spouse, children, parents, sibs), and also provides a global index of social adjustment. This instrument has been used with a variety of psychiatric and non-psychiatric populations to assess social adjustment and functioning and has an overall reliability of .83.

Rorschach Inkblot Test. The Rorschach Inkblot Test is a projective test made up of ten inkblot cards. Individuals are asked to tell the examiner what each of the cards reminds them of or looks like to them. Once responses are elicited, the examiner asks the subject which areas of the blot were used for the response, and what features of the blot contributed to the response.

In the present study, subjects were individually administered the Rorschach (using standard procedures) by advanced clinical psychology
graduate students. The protocols were then scored by two raters trained to score measures selected for this study. The first six protocols (with subjects from each diagnostic group) were scored by both raters. Every fifth protocol was then scored to prevent scoring drift and to obtain inter-rater reliability scores (total of ten). Protocols were scored for the following:

1. Deviant Verbalizations (CONTAM, INCOM, CONFAB, FABCOM) (Rappaport, Gill, & Schafer, 1968): Contaminations, incongruent combinations, confabulizations, and fabulized combinations are believed to represent ego boundary disturbances as related to thought disorder on the Rorschach (Blatt & Berman, 1984; Blatt & Ritzler, 1984; Lerner, Sugarman, & Barbour, 1985). Contamination responses (CONTAM) are considered the most severe form of boundary disturbance. CONTAM responses are described by Blatt & Berman (1984) as responses "in which independent concepts or images lose their identity and definition. Boundaries are so unstable that independent representations cannot be consistently maintained, and they merge, or tend to merge, into a single distored unit." (p. 231-232).

In incongruous combinations (INCOM) the percept is described as being a combination of incongruent images. Exner (1978) states that these percepts are a "condensation of blot details or images into a single incongruous percept" (p.48). A response such as a man with a dog's head is an example of an INCOM.

In the confabulized (CONFAB) response, sufficient self and other boundaries exist but the response to the blot frequently becomes overelaborated with affect and/or detail. According to Lerner, Sugarman, & Barbour (1985), these kinds of responses show "weak or arbitrary connec-
tions between content and affect" where "internal affect overrides the form" (p. 52). Also considered CONFAB are responses with "overelaborated personal references" and where there is "a degree of overspecificity grossly unspecified by the blot" (p. 52).

The least severe kind of boundary disturbance is the fabulized combination (FABCOM). In these type of responses the object and action and relationship between objects are realistically separated, however, "unrealistic thinking is expressed by establishing illogical, arbitrary relationships between independent and separate percepts or concepts" (Blatt & Berman, 1984, p. 232). An example of a FABCOM is a response such as two bugs talking to each other.

In order to represent a continuum of boundary disturbance, these four kinds of responses were assigned weights of 4 (CONTAM), 3 (INCOM), 2 (CONFAB), and 1 (FABCOM). From this total score percents were calculated (Total Score/Number of Responses and then multiplied by 100).

2. Form Quality (X+ %) (Exner, 1978): In the present study, The X+ % for each protocol was calculated to obtain a measure of reality testing. This score was obtained using the standard scoring method outlined by Exner (1978). Pearson product-moment correlation coefficients showed interrater reliability to be .93 (p < .0001).

3. Barrier and Penetration Scores (Fisher, 1970): Barrier and Penetration response are hypothesized to measure the degree of intactness of body boundaries. A high number of barrier responses is believed to represent well defined body boundaries whereas, a high number of penetration responses suggests a deficit in body boundaries. Examples of Barrier responses are percepts such as clothing, containers, buildings, etc. In contrast, examples of Penetration responses are percepts which
indicate disruption, aggression, and damage such as a person cut open, a withered leaf, an injured animal, etc.

In the present study, the total number of Barrier responses and Penetration Responses were calculated and percents obtained (Total Number of Barrier Responses/Total Number of Responses; Total Number of Penetration Responses/Total Number of Responses, multiplied by 100). Pearson product-moment correlation coefficients calculated for interrater reliability were .97 (p < .0001) for Barrier percent scores and were .90 (p < .0001) for Penetration scores).

4. Object Representation (Blatt, Brenneis, Schimek & Glick, 1976): This complex system was developed based on a developmental understanding of the concept of object relatedness and was designed for scoring level of object representation on the Rorschach. Blatt's system consists of scoring human and quasi-human whole and part-object responses for the following areas:

1. Differentiation
   a) Quasi-human detail
   b) Human detail
   c) Whole quasi-human
   d) Whole human

2. Articulation
   a) Perceptual Features
   b) Functional Features

3. Integration: Nature of action
   a) No Action
   b) Unmotivated Action
c) Reactive Action  
d) Intentional Action  

4. Integration: Object-action integration  
   a) Fused  
   b) Incongruent  
   c) Nonspecific  
   d) Congruent  

5. Integration: Nature of interaction  
   a) Active-Passive  
   b) Active-Reactive  
   c) Active-Active  

6. Integration: Content of interaction  
   a) Malevolent  
   b) Benevolent  

The number of each of these kinds of responses are then multiplied with their corresponding weight and a total sum is then obtained. The Total OR score is obtained by dividing the total sum by the total number of responses. This final score represents the developmental level of object representation with higher scores indication higher levels of development. Interrater reliability was calculated for the Total OR score using the Pearson product-moment correlation and showed a correlation of .95 (p < .0011).  

Two related scores were calculated for this study as suggested by Blatt and Berman (1984): 1) Good object representation (OR+) and 2) Poor object representation (OR-). These scores were calculated in the same manner as the overall scores except that initially differentiation percepts are categorized according to good or poor form quality and total
scores obtained within these two groups. According to Blatt & Berman (1984) "the residualized weighted sum of accurately perceived human responses (OR+) is viewed as indicating the capacity for investment in satisfying interpersonal relationships. The residualized weighted sum of inaccurately perceived human responses (OR-) is viewed as an indication of the tendency to become invested in autistic fantasies rather than realistic relationships." (p. 231).

Procedure

Subject Selection

Psychiatric inpatients and outpatients from Michael Reese Hospital with an intake diagnosis of anorexia nervosa or bulimia were asked to participate in this study and informed consent was obtained. Patients were then given a packet containing the following questionnaires: EAT, EDI, EPQ, MDI, and the SAS and were asked to complete these questionnaires on their own. Demographic information was then collected from patients' charts (i.e. age, race, current weight, height, past history of eating disorders, etc.). Based on the EPQ and chart information, patients were then screened to determine their eligibility for the anorectic or the bulimic group. Patients used in this study were in various stages of treatment and hospitalization, and length of illness varied from subject to subject.

Loyola University undergraduates were also asked to participate in this study, primarily for the purpose of identifying weight-preoccupied individuals who were not currently anorectic or bulimic. Initially, the EAT, EDI, EPQ, MDI, SAS and a sheet asking about demographic information and weight history were distributed in introductory psychology classes,
along with consent forms.

A total of 197 individuals completed and returned the questionnaire packets. Of these, 35 admitted to significant eating problems, however, 16 were disqualified from the study for a variety of reasons (e.g. high scores not due to true weight preoccupation, transient bulimic symptoms, obesity, eating disorder not currently present but history of eating disorder within the past year). Individuals who appeared to meet the criteria for any of the three groups were then contacted by phone and asked to participate in the study. Only one subject declined to participate in the study when contacted by phone, and one subject could not be reached. The remaining 17 subjects were used in this study, with 15 being assigned to the Weight-Preoccupied group and 2 to the bulimic group.

Testing and Interview Session

The testing and interview sessions were conducted on an individual basis by an advanced clinical psychology graduate student. Subjects who met the diagnostic criteria (outlined previously) were given the Information and Block Design subscales of the WAIS-R or WISC-R (depending on age), the Rorschach, and a brief clinical interview (based on DSM III criteria) to diagnose for depression. If any patient had already received psychological testing that included the WISC-R, WAIS-R, or Rorschach, these data were obtained from the patient's hospital records. Sessions typically lasted between 60 and 90 minutes.

Included in the testing session was a brief clinical interview in which subjects were asked about symptoms of depression as outlined for DSM III diagnoses of Major Depressive Episode and Dysthymic Disorder. Subjects were diagnosed as having a Major depressive Episode, a Dys-
thymic Disorder, both types of depression diagnoses, depressive features (some depressive symptoms but insufficient for a depression diagnosis), or as not depressed. Depression diagnoses were used in this study as an additional dependent measure of type and incidence of depression in anorexia, bulimia, and weight preoccupation.
CHAPTER IV

RESULTS

The results of this study will be divided into three major sections. The first section will present demographic data and symptomatology of subjects in this sample. The second section will outline the findings from the depression data including DSM III depression diagnoses, suicidal findings, and the results from the MDI. The final section will present the data from this study related to personality organization, including the results from the Rorschach testing as well as the SAS data.

Subject Characteristics

Demographic Data

A comparison of the Anorectic ('AN'), Bulimic ('BUL'), and Weight-Preoccupied ('WP') subject groups revealed few demographic differences as shown in Table 1. Chi square analyses revealed no statistically significant differences among groups in terms of age, race, marital status, birth order, and parents' marital status. Subjects were also compared for intellectual level on two subscales of the WISC-R/WAIS-R (Information and Block Design). Results of analyses of variance showed no statistically significant differences in intellectual level on either scale between the three groups. Mean scores for each group as well as for the total subject mean showed scores within the
Table 1

Demographic Data

<table>
<thead>
<tr>
<th>Variables</th>
<th>Anorectic</th>
<th>Bulimic</th>
<th>Weight-Preoccupied</th>
</tr>
</thead>
<tbody>
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<td>Race</td>
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<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
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</tr>
<tr>
<td>Birth order</td>
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<td></td>
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</tr>
<tr>
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<td>4</td>
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</tr>
<tr>
<td>Middle</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Youngest</td>
<td>4</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Only</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>(missing n)</td>
<td>(2)</td>
<td>(2)</td>
<td>(0)</td>
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<td>Separated</td>
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<td>1</td>
<td>0</td>
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<td>Single</td>
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<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Parents' Marital Status</td>
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<td></td>
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<td>8</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Divorced</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Separated</td>
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<td>0</td>
<td>1</td>
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<td>Parent Death</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Age M/SD</td>
<td>18.07/4.68</td>
<td>21.00/6.20</td>
<td>18.20/.78</td>
</tr>
<tr>
<td>IQ Information M/SD</td>
<td>9.93/2.71</td>
<td>10.07/2.31</td>
<td>9.27/1.53</td>
</tr>
<tr>
<td>Block Design M/SD</td>
<td>10.53/2.13</td>
<td>11.40/2.75</td>
<td>9.60/2.61</td>
</tr>
</tbody>
</table>
average range on both scales (Information scale: $\bar{M}_{AN} = 9.93$, S.D. = 2.71; $\bar{M}_{BUL} = 10.07$, S.D. = 2.31; $\bar{M}_{WP} = 9.27$, S.D. = 1.53) (Block Design scale: $\bar{M}_{AN} = 10.53$, S.D. = 2.13; $\bar{M}_{BUL} = 11.40$, S.D. = 2.75; $\bar{M}_{WP} = 9.60$, S.D. = 2.61).

Socioeconomic status was computed using a modified Hollingshead-Redlich approach (Weiss & Weiss, 1979) which uses occupational and educational position scales. In relation to SES, statistically significant differences were found between groups $\chi^2(6, N = 43) = 17.13, p < .01$. In the Anorectic group, 60% fell into Class I-II (Upper Class), and 40% fell into Class III (Middle Class, with no subjects in the Lower Class range (Class IV and V). In the BUL group, 28.6% fell into Class I-II, and 71.4% fell into Class III. In the WP group, 14.3% fell into Class I-II, 50% fell into Class III, and 35.7% fell into Class IV. While 100% of ANs and BULs were classified as Upper or Middle Class in SES, only 64.3% of the WP subjects fell into these two categories. Thus, despite the fact that subjects were selected based on distinct eating attitudes and behaviors, individuals in the three groups were very much alike in terms of demographic characteristics with the exception of SES which was lower for the WP group.

**Group Symptomatology**

While there were few demographic differences between the three subject groups, there were distinct differences in the symptom picture. Analyses of variance revealed no statistically significant differences between the heights of subjects, however, there were significant differences for all three weight variables: highest weight, $F(2, 40) = 21.01$, $p < .01$; lowest weight, $F(2, 42) = 21.01$, $p < .00$; and current weight, $F(2, 42) = 27.78$, $p < .00$. These differences were then explored using
Duncan Multiple Range tests. In terms of current weight, ANs weighed the least ($M = 93.73$, $S.D. = 14.59$), followed by the BUL and WP groups with no significant differences between the BUL and WP groups ($BUL \ M = 131.87$, $S.D. = 6.19$; $WP \ M = 133.13$, $S.D. = 3.45$). In terms of highest weight, BULs weighed significantly more than AN and WP subjects ($AN \ M = 124.43$, $S.D. = 21.93$; $BUL \ M = 161.57$, $S.D. = 41.72$; $WP \ M = 144.07$, $S.D. = 21.90$). In terms of lowest weight, ANs reached the lowest levels ($M = 85.00$, $S.D. = 10.76$), followed by BULs ($M = 113.00$, $S.D. = 20.07$), and then by WP subjects ($M = 123.67$, $S.D. = 18.32$).

Statistically significant group differences were also found between the frequency of prior psychiatric treatment, $x^2(4, \ N = 45) = 14.40$, $p < .01$, with 33.3% of ANs, 13.3% of BULs, and 0.0% of WP subjects receiving prior inpatient treatment, and 46.7% of ANs, 46.7% of BULs, and 0.0% of WP subjects receiving prior outpatient treatment. Only 20.0% of ANs had received no prior psychiatric treatment, compared to 40.0% of BULs, and 100.0% of WP subjects.

A comparison of the three groups on prior eating disorder diagnoses indicated that no AN subjects had been previously diagnosed as normal weight bulimics, and no BUL subjects had been previously diagnosed as anorectic. However, two BULs had reached prior low weights in the anorectic weight range (13.4%) and 3 had reached borderline anorectic weight levels (20.0%). No WP subjects had previously been diagnosed as AN or BUL, however, one subject in this group had reached a low weight in the anorectic range (6.7%).

Results of the EPQ showed significant group differences, $x^2(6, \ N = 45) = 30.32$, $p < .0001$, with many of the AN and BUL subjects reported menstruation problems. Amenorrhea was reported to occur in 11 of the 12
female ANs (91.7%) with the twelfth female experiencing very irregular menstrual patterns. Amenorrhea was reported by 2 out of 13 of the female BULs (15.4%) with 4 other female BULs experiencing irregular menstrual patterns. None of the WP subjects reported amenorrhea, and only 2 of the 14 females in this group reported irregular menstrual patterns (14.3%). By comparison, only 4 of the female BULs reported regular menstrual patterns (30.8%).

Results of the EPQ also showed statistically significant differences between groups in sexual interest, $\chi^2(6, N = 41) = 13.57, p < .05$. Only 33.4% of ANs expressed an interest in sex (very much or somewhat) compared to 48.3% of BULs, and 85.8% of WP subjects. In contrast, 33.3% of ANs expressed no interest in sex, compared to 0.0% of BULs, and only 7.1% of WP subjects.

Not surprisingly, there were statistically significant differences in the eating disordered symptomatology among the three groups ($p$'s < .05). Eating disordered symptoms were assessed in terms of frequency of binge behavior, self-induced vomiting, and laxative abuse. A summary of binge eating and purging data is presented in Table 2. By definition, no WP subjects reported any significant problems with binge eating, self-induced vomiting, or laxative abuse. Significant differences were found between groups for binge eating, $\chi^2(8, N = 45) = 33.5, p < .00$, and for vomiting, $\chi^2(8, N = 45) = 27.08, p < .00$, and a trend was found for laxative abuse $\chi^2(8, N = 45) = 14.85, p < .06$. In the AN group, 6 of the 7 bulimic ANs reported binge eating at least weekly, with 5 of them binge eating at least daily. Of the BULs, all subjects binged at least weekly, with 11 of them binge eating at least daily.

In relation to purging behavior, all the bulimic ANs ($n = 7$)
Table 2

Frequency of Bulimic Symptoms for Anorectic and Bulimic Groups

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Frequency</th>
<th>Anorectic n</th>
<th>%</th>
<th>Bulimic n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binge Eating</td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Several Daily</td>
<td>3</td>
<td>20.0</td>
<td>8</td>
<td>53.3</td>
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<tr>
<td>Daily</td>
<td>2</td>
<td>13.4</td>
<td>3</td>
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<tr>
<td>Weekly</td>
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<td>6.7</td>
<td>4</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>Several Monthly</td>
<td>1</td>
<td>6.7</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Several Daily</td>
<td>5</td>
<td>33.3</td>
<td>9</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>1</td>
<td>6.7</td>
<td>3</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>1</td>
<td>6.7</td>
<td>1</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>Several Monthly</td>
<td>1</td>
<td>6.7</td>
<td>1</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Laxatives</td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Several Daily</td>
<td>1</td>
<td>6.7</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>1</td>
<td>6.7</td>
<td>3</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>Several Monthly</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
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</tr>
<tr>
<td>Monthly</td>
<td>3</td>
<td>20.0</td>
<td>1</td>
<td>6.7</td>
<td></td>
</tr>
</tbody>
</table>

\(^a_n = 15.\)
reported inducing vomiting at least weekly, with 6 of these vomiting at least daily. No ANs reported purging using only laxatives, however, 2 ANs reported abusing laxatives at least daily along with vomiting. In the BUL group, 14 subjects reported vomiting at least weekly, with 12 vomiting at least daily. Only one BUL subject purged using laxatives only. Thus, of the ANs who reported purging, 5 used both self-induced vomiting and laxatives, and 2 used only self-induced vomiting. Of the BULs, 5 reported using both methods of purging, 9 used only self-induced vomiting, and 1 purged using laxatives only.

The degree of pathological eating attitudes and behaviors was measured using the Eating Attitudes Test. Results of these data revealed statistically significant differences among the three groups, $F(2, 42) = 10.35$, $p < .001$, with ANs and BULs scoring higher than WP subjects (Duncan Multiple Range Test, $p < .05$). Differences between AN and BUL groups were not significant, however ANs tended to score higher than BULs. No differences were found between restricting AN and Bulimic AN subjects. The AN group received a mean EAT score of 63.73, S.D. = 18.55 (Restricting AN $M = 63.00$, S.D. = 19.06; Bulimic AN $M = 64.57$, S.D. = 19.42); the BUL group received a mean EAT score of 51.27, S.D. = 24.03; and the WP group received a mean EAT score of 33.87, S.D. = 7.56.

The results of the Eating Disorder Inventory are summarized in Table 3. For comparison purposes, normative data (Garner & Olmsted, 1984) are also included in this table. Of the eight EDI scale scores, only the Drive for Thinness and Perfectionism scales showed no group differences. All the remaining EDI scale scores showed significant group differences, with ANs and BULs consistently scoring higher than WP subjects (Duncan Multiple Range Test, $p < .05$). In addition, BULs
<table>
<thead>
<tr>
<th>EDI Scales</th>
<th>Group</th>
<th>F Value</th>
<th>Norms&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Anorectic (n = 155)</th>
<th>Female Control (n = 271)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anorectic (n = 15)</td>
<td>Bulimic (n = 15)</td>
<td>Weight-Preoccupied (n = 15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive for M</td>
<td>14.9 (13.8)</td>
<td>14.1 (6.1)</td>
<td>16.1 (5.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinness SD</td>
<td>6.0 (6.1)</td>
<td>4.8 (5.5)</td>
<td>2.4 (5.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interoceptive M</td>
<td>11.7 (11.4)</td>
<td>12.6 (7.0)</td>
<td>4.8 (3.6)</td>
<td>6.58** (2.3)</td>
<td>(3.6)</td>
</tr>
<tr>
<td>Awareness SD</td>
<td>6.8 (7.0)</td>
<td>8.3 (3.6)</td>
<td>3.1 (3.6)</td>
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</tr>
<tr>
<td>Bulimia M</td>
<td>4.0 (5.5)</td>
<td>11.5 (6.3)</td>
<td>2.9 (3.1)</td>
<td>14.82** (1.7)</td>
<td>(3.1)</td>
</tr>
<tr>
<td>SD</td>
<td>5.7 (6.3)</td>
<td>5.1 (3.1)</td>
<td>2.9 (3.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bodily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissatisfaction M</td>
<td>13.8 (15.5)</td>
<td>15.6 (7.8)</td>
<td>20.9 (8.1)</td>
<td>4.15** (2.3)</td>
<td>(3.8)</td>
</tr>
<tr>
<td>SD</td>
<td>7.6 (7.8)</td>
<td>8.5 (3.8)</td>
<td>4.5 (3.8)</td>
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<td></td>
</tr>
<tr>
<td>Ineffic- M</td>
<td>9.6 (12.1)</td>
<td>10.4 (8.6)</td>
<td>2.7 (3.8)</td>
<td>6.22** (2.3)</td>
<td>(3.8)</td>
</tr>
<tr>
<td>tiveness SD</td>
<td>7.1 (8.6)</td>
<td>7.8 (3.8)</td>
<td>4.1 (3.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maturity M</td>
<td>5.9 (5.6)</td>
<td>5.8 (5.8)</td>
<td>1.3 (5.8)</td>
<td>3.14** (2.2)</td>
<td>(2.5)</td>
</tr>
<tr>
<td>Fears SD</td>
<td>6.6 (5.8)</td>
<td>7.2 (5.8)</td>
<td>1.5 (5.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfectionism M</td>
<td>9.5 (8.6)</td>
<td>9.8 (6.5)</td>
<td>7.5 (6.5)</td>
<td>1.10 (5.3)</td>
<td>(4.3)</td>
</tr>
<tr>
<td>SD</td>
<td>4.2 (5.3)</td>
<td>5.6 (5.3)</td>
<td>4.0 (5.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interper- M</td>
<td>6.5 (6.4)</td>
<td>8.9 (2.4)</td>
<td>3.0 (2.4)</td>
<td>6.58** (2.4)</td>
<td>(2.4)</td>
</tr>
<tr>
<td>sonal SD</td>
<td>4.5 (4.9)</td>
<td>4.3 (4.9)</td>
<td>3.8 (4.9)</td>
<td></td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

*P < .05.  **P < .01.

<sup>a</sup>Note. The data for these norms are from the *EDI Manual* (p. 26) by D.M. Garner & M.P. Olmsted, 1984.
scored higher than ANs on the Bulimia scale (Duncan Multiple Range Test, \( p < .01 \)).

**Depression Measures**

In relation to overall level of depression, it was hypothesized that the BUL group would be the most depressed, followed by the AN group with the WP group being the least depressed (BUL > AN > WP). This hypothesis was tested using the following dependent measures: EPQ, DSM III diagnoses, MDI Total scores, and BDI Total scores.

**EPQ Depression Data**

The EPQ provides information on depression in two ways. Subjects are asked to rate the frequency of depressive feelings on a four point scale: always (4), often (3), sometimes (2), rarely/never (1). In addition, subjects are asked about suicidal feelings and behaviors. These are categorized as follows: (1) No suicidal thoughts or gestures/ attempts, (2) Suicidal ideation but no gestures, (3) Suicidal gesture(s), and (4) Suicidal attempt(s).

Results for the EPQ frequency of depression scale are presented in Table 4. Results of these data showed the BUL group as admitting to a higher frequency of depression, followed by the AN group, with the WP group being least often depressed, however, while these results approached significant levels they did not reach statistical significance, \( \chi^2(6, \ N = 42) = 12.08, \ p < .06 \). Thus, the results of the EPQ depression scale showed a trend for supporting the hypothesis that the BUL group would be the most frequently depressed, followed by the AN group and then the WP group.

The results of the EPQ data on suicidal ideation/behavior are
Table 4

Frequency of Self-Reported EPQ Depressive Feelings by Group

<table>
<thead>
<tr>
<th>EPQ Scale Frequency</th>
<th>Anorectic (N = 13)</th>
<th>Bulimic (N = 12)</th>
<th>Weight-Preoccupied (N = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Always/Very Often</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Often</td>
<td>8</td>
<td>53.3</td>
<td>8</td>
</tr>
<tr>
<td>Sometimes</td>
<td>7</td>
<td>46.7</td>
<td>3</td>
</tr>
<tr>
<td>Rarely/Never</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
</tbody>
</table>
shown in Table 5. These results also approached but did not reach statistical significance with the two eating disorder groups appearing similar. What seems important about these findings is that while close to one third of both eating disordered groups had made either suicidal attempts or gestures, none of the WP subjects had done so. However, two thirds of the WP subjects admitted to suicidal ideation.

**DSM III Diagnoses**

Brief individual interviews were conducted to determine whether subjects qualified for a DSM III diagnosis of Major Depressive Episode (MDE), Dysthymic Disorder, or reported any depressive symptoms. It was initially hypothesized that the BUL group would more frequently qualify for a depression diagnosis, with the AN group being next, and the WP group being the least often diagnosed as depressed. As shown in Table 6, this hypothesis was partially confirmed with the WP group being indeed least often diagnosed as depressed. However, both of the eating disordered groups subjects frequently qualified for a depression diagnosis.

Depression categories were collapsed and Chi Square analyses conducted. In these analyses, the MDE category was combined with the DD category and compared to subjects who were diagnosed as not depressed (ND). Subjects with depressive symptoms but who did not qualify for a full depression diagnosis were omitted from these analyses.

Results showed statistically significant differences for the three groups, \( \chi^2 (2, N = 45) = 6.05, p < .05 \). The two eating disordered groups were virtually identical with the majority of subjects qualifying for a depression diagnosis. In addition, there were no significant differences between restricting AN and bulimic AN subjects. Of the AN
<table>
<thead>
<tr>
<th>Suicidal Behavior</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anorectic (n = 15)</td>
</tr>
<tr>
<td></td>
<td>Bulimic (n = 14)</td>
</tr>
<tr>
<td></td>
<td>Weight-Preoccupied (n = 15)</td>
</tr>
<tr>
<td>Attempt(s)</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Gesture(s)</td>
<td>4</td>
</tr>
<tr>
<td>Ideation Only</td>
<td>4</td>
</tr>
<tr>
<td>None</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 5

Self-Reported Suicidal Behavior on the EPQ by Group
Table 6

**DSM III Depression Diagnoses by Group**

<table>
<thead>
<tr>
<th>DSM III Diagnosis</th>
<th>Anorectic (n = 15)</th>
<th>Bulimic (n = 15)</th>
<th>Weight-Preoccupied (n = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Major Depression</td>
<td>3</td>
<td>20.0</td>
<td>3</td>
</tr>
<tr>
<td>Dysthymic Disorder</td>
<td>1</td>
<td>6.7</td>
<td>3</td>
</tr>
<tr>
<td>Double Depression</td>
<td>5</td>
<td>33.3</td>
<td>3</td>
</tr>
<tr>
<td>Depressive Features</td>
<td>2</td>
<td>13.3</td>
<td>3</td>
</tr>
<tr>
<td>No Depression</td>
<td>4</td>
<td>26.7</td>
<td>3</td>
</tr>
</tbody>
</table>
subjects, 9 out of 13 (69.2%) were diagnosed as depressed and 9 out of 12 (75.0%) of the BUL subjects were diagnosed as depressed. By comparison, only 3 out of 14 (21.4%) of the WP subjects were diagnosed as depressed.

In relation to specific DSM III depressive symptoms, anorectics who were diagnosed as depressed reported an average of 6.88 MDE symptoms and 9.14 DD symptoms. BULs diagnosed as depressed reported an average of 6.33 MDE symptoms and 8.00 DD symptoms. By comparison, WP subjects diagnosed as depressed reported an average of 5.33 MDE symptoms and 5.00 DD symptoms. This suggests that ANs may experience more severe and pervasive depressions than do BULs, and that both eating disorder groups do more so than the WP group.

A second interesting finding was that in the AN group 5 of the 9 (55.5%) depressed subjects qualified for a double diagnoses of MDE and DD. In the BUL group, 3 out of 9 (33.3%) qualified for a double depression diagnosis. However, none of the three depressed WP subjects qualified for a double depression diagnosis. Of the five anorectics with a double depression, four subjects were bulimic ANs (80%). In fact, only one restricting AN subject was diagnosed with a Dysthymic Disorder. These data suggest that bulimics, whether anorectic or not, may be more chronically depressed, as 57.2% of the bulimic ANs and 66.7% of the BULs received either a DD or a double depression diagnosis. In comparison, 25% of the restricting AN (DD n = 1, Double Depression n = 1 and only 6.7% of WP subjects (DD = 1) received either of these diagnoses.

Depression Inventories

It was also hypothesized that the BUL group would score highest on the Total MDI score, followed by the AN group and then the WP group, and
that distinct depression profiles would differentiate the three groups on the MDI. Specifically it was believed that (1) ANs would score higher than BULs and WP subjects on Social Introversion; (2) BULs would score higher than ANs and WP subjects on Irritibility and Instrumental Helplessness; and (3) both eating disordered groups would score higher than the WP group on Guilt, Cognitive Difficulty, and Learned Helplessness.

The results of the MDI are presented in Table 7 and Figure 1. For the Total MDI score there were statistically significant differences among groups, $F(2, 42) = 5.52, p < .01$. Thus, total MDI scores provided partial support for the hypothesis that the BUL group would be most depressed, followed by the AN group and then the WP group. The AN and the BUL groups were found to be significantly more depressed than the WP group (Duncan Multiple Range Test, $p < .01$). In addition, trends were found for the Guilt and Energy Level scales with bulimics scoring highest on Guilt and anorectics scoring highest on Energy Level (low) ($p < .10$). Both eating disordered groups received mean Total MDI scores in the depressed range (T score $> 60$), while the mean Total MDI score for the WP group was in the non-depressed range (T score $< 60$).

Once again partial support for the hypotheses concerning the MDI profile differences was found. A comparison of the three groups on the MDI scale scores using oneway ANOVA's showed 5 of the 10 scales as statistically significant at the $p < .05$ or $p < .01$ level. When Duncan Multiple Range Tests were performed on these 5 scales, group differences were found between the two eating disordered groups and the WP group, with the eating disordered groups scoring higher on Pessimism and Sad Mood ($p < .01$). The AN group scored higher than the WP group on Social
Table 7

MDI Standard Scores by Group

<table>
<thead>
<tr>
<th>MDI Scale Scores</th>
<th>Group</th>
<th>Anorectic (n = 15)</th>
<th>Bulimic (n = 15)</th>
<th>Weight-Preoccupied (n = 15)</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pessimism</td>
<td>M</td>
<td>61.5</td>
<td>61.9</td>
<td>48.3</td>
<td>7.13***</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>10.6</td>
<td>11.5</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Cognitive</td>
<td>M</td>
<td>61.2</td>
<td>56.2</td>
<td>58.9</td>
<td>.83</td>
</tr>
<tr>
<td>Difficulty</td>
<td>SD</td>
<td>13.6</td>
<td>8.0</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>Guilt</td>
<td>M</td>
<td>58.4</td>
<td>62.3</td>
<td>54.4</td>
<td>2.13*</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>12.7</td>
<td>7.6</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>Low Energy</td>
<td>M</td>
<td>64.3</td>
<td>61.5</td>
<td>55.5</td>
<td>2.32*</td>
</tr>
<tr>
<td>Level</td>
<td>SD</td>
<td>13.7</td>
<td>12.2</td>
<td>10.1</td>
<td></td>
</tr>
<tr>
<td>Irritability</td>
<td>M</td>
<td>53.9</td>
<td>53.7</td>
<td>52.4</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>11.8</td>
<td>13.1</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>M</td>
<td>61.5</td>
<td>56.7</td>
<td>48.5</td>
<td>5.00***</td>
</tr>
<tr>
<td>Introversion</td>
<td>SD</td>
<td>11.8</td>
<td>12.2</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Low Self-Esteem</td>
<td>M</td>
<td>58.5</td>
<td>58.5</td>
<td>54.5</td>
<td>.72</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>11.8</td>
<td>8.9</td>
<td>10.8</td>
<td></td>
</tr>
<tr>
<td>Sad</td>
<td>M</td>
<td>64.9</td>
<td>65.3</td>
<td>51.5</td>
<td>6.88***</td>
</tr>
<tr>
<td>Mood</td>
<td>SD</td>
<td>11.8</td>
<td>12.6</td>
<td>10.1</td>
<td></td>
</tr>
<tr>
<td>Learned Helplessness</td>
<td>M</td>
<td>63.4</td>
<td>67.5</td>
<td>55.5</td>
<td>3.57**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>13.6</td>
<td>12.3</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>Instrumental Helplessness</td>
<td>M</td>
<td>49.4</td>
<td>59.4</td>
<td>49.6</td>
<td>4.31***</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>12.6</td>
<td>12.4</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Full Scale</td>
<td>M</td>
<td>64.5</td>
<td>64.6</td>
<td>54.5</td>
<td>5.52***</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>11.3</td>
<td>9.0</td>
<td>8.2</td>
<td></td>
</tr>
</tbody>
</table>

*p < .10.  **p < .05.  ***p < .01.
Figure 1. Comparison of MDI Standard Sclae scores by Group.
Introversion. The BUL group scored significantly higher than the AN group only on Instrumental Helplessness ($p < .05$). However, the BUL group scored higher than the WP group on both Learned and Instrumental Helplessness ($p < .01$). On Pessimism, Energy Level (low), Sad Mood, and Learned Helplessness scales, both eating disordered groups received mean T scores in the depressed range. In addition, on Social Introversion, only the AN group scored in the depressed range, and on Guilt, only the BUL group scored in the depressed range.

On no scale did the WP group score in the depressed range. In contrast, the AN group scored in the depressed range on 6 out of 10 scales: Pessimism, Cognitive Difficulty, Energy Level, Social Introversion, Sad Mood, and Learned Helplessness. The BUL group scored in the depressed range on 5 out of 10 scales: Pessimism, Energy Level, Sad Mood, Learned Helplessness, and Guilt. For the AN group, the three highest scales in the depressed range were Sad Mood (highest), Energy Level (second highest), and Learned Helplessness, while in the BUL group, the three highest scales were Learned Helplessness (highest), Sad Mood (second highest), and Pessimism.

When the scale scores of bulimic ANs and restricting ANs were compared using oneway ANOVAs, no statistically significant differences were found. However, for the restricting ANs, 8 out of 10 scale scores were in the depressed range, while for the bulimic AN group only 3 out of 10 scale scores were in this range. For the restricting ANs the three highest scores were Pessimism (highest), Social Introversion (second highest), and Learned Helplessness, and for the bulimic AN group they were Sad Mood (highest), Energy Level (second highest), and Learned Helplessness.
Beck Depression scores (BDI) were collected on 38 of the 45 subjects (AN \( n = 12 \), BUL \( n = 11 \), WP \( n = 15 \)). Statistically significant group differences were found using one-way ANOVAs, with the AN group scoring the highest followed by the BUL group, \( F(2, 35) = 6.50, p < .01 \). Both eating disordered groups scored in the depressed range (BDI cutoff for depression is typically 15 and above) (AN \( M = 19 \), S.D. = 10.50; BUL \( M = 16.27 \), S.D. = 9.42), while the WP group scored much below this cutoff (\( M = 7.47 \), S.D. = 6.39). Results of these data showed statistically significant differences between the two eating disordered groups and the WP group, but not between the AN and BUL groups, or between restricting AN and bulimic AN subjects (Duncan Multiple Range Test, \( p < .01 \)).

Summary of Depression Findings

In summary, partial support was found for the depression hypotheses. Overall across measures, the two eating disordered groups repeatedly were shown to be more depressed than the WP group. On all of these measures there were no statistically significant differences between the AN and BUL groups, however, for some measures anorectics tended to look slightly more depressed while on others, bulimics tended to look more depressed. On the two dependent measures with depression cut off scores (MDI, BDI), both eating disordered groups scored in the depressed range, while the WP group scored in the non-depressed range.

In addition, partial support was received for hypotheses concerning depression profile differences. Results of these data confirmed the AN group as scoring significantly higher than the WP group on Social Introversion. While it was also shown that the Bulimic group scored higher than the other two groups on Instrumental Helplessness, only the BUL group scored higher than the WP group on Learned Helplessness. In
addition, it was also found that both eating disordered groups scored significantly higher than the WP group on Pessimism and Sad Mood. While no support was found for the hypothesis that eating disordered groups would score higher on Guilt, there was a trend for group differences, with the BUL group scoring highest, followed by the AN group, and then the WP group.

Overall, depression in both eating disordered groups was characterized by sad mood and passive learned helplessness. Depressive feelings of sadness, passive learned helplessness, guilt, low energy level, and pessimism were common features for both anorectics and bulimics. Patterns of depression in anorectics showed added cognitive difficulties, and social introversion, while bulimic patterns were typically more characterized by feelings of guilt and instrumental helplessness.

Social Adjustment Scale

The SAS was administered to obtain a self-report measure of subjects' relationships with others and social adjustment in work, leisure, and family environments. The results of these data are presented in Table 8. It was hypothesized that WP subjects would have the highest level of social adjustment followed by the BUL and then the AN group (AN > BUL > WP). Partial support was obtained for this hypothesis.

On the SAS Work and Family scales, statistically significant differences were found between groups (Work: $F(2, 41) = 3.86, |p| < .05$; Family: $F(2, 40) = 3.67, p < .05$) as well as on the Total SAS score ($F(2, 40) = 7.23, p < .01$). No significant differences were found on the SAS Leisure scale. Using a Duncan Multiple Range Test, significant differences were found between the AN and WP groups with the AN group...
Table 8

SAS Scores by Group

<table>
<thead>
<tr>
<th>SAS Scale</th>
<th>Anorectic ((n = 15))</th>
<th>Bulimic ((n = 14))</th>
<th>Weight-Preoccupied ((n = 15))</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>( M ) 2.71 (1.0)</td>
<td>2.31 (0.8)</td>
<td>1.94 (0.4)</td>
<td>3.86*</td>
</tr>
<tr>
<td>Social/Leisure</td>
<td>( M ) 2.76(^a) (0.7)</td>
<td>2.63 (0.6)</td>
<td>2.35 (0.5)</td>
<td>1.77</td>
</tr>
<tr>
<td>Family</td>
<td>( M ) 2.66 (0.7)</td>
<td>2.32(^b) (0.5)</td>
<td>2.04 (0.6)</td>
<td>3.97*</td>
</tr>
<tr>
<td>Total</td>
<td>( M ) 2.67 (0.5)</td>
<td>2.41(^b) (0.4)</td>
<td>2.12 (0.3)</td>
<td>7.23**</td>
</tr>
</tbody>
</table>

\(^{a}p < .05\) \quad \quad **^{b}p < .01\)

\(a_{n} = 14\) \quad \quad \(b_{n} = 13\)
scoring highest of all three groups (most impaired) \((p < .05)\). This appears to indicate that the ANs were more impaired in social adjustment at work, with family, and overall than were the WP group. While anorectics received more elevated scores than bulimics on the SAS, this difference did not reach statistical significance.

**Personality Organization Measures**

Personality organization was evaluated using measures of object relatedness, ego boundaries, and reality testing on the Rorschach. Overall, there were no significant group differences on the Rorschach in the total number of responses \((AN \bar{M} = 18.00, S.D. = 6.14; BUL \bar{M} = 18.80, S.D. = 7.06; WP \bar{M} = 19.93 S.D. = 6.67)\), and the percent of human responses \((AN \bar{M} = 34.4, S.D. = 8.5; BUL \bar{M} = 36.9, S.D. = 20.0; WP \bar{M} = 32.6, S.D. = 14.7)\). This suggests that the use of both percent and raw scores are valid in making group comparisons, as response productivity was not significantly different for the three groups. The results of the Rorschach data to be presented here are as follows; reality testing \((X+\%)\), ego boundaries \((\text{Barrier, Penetration, and deviant verbalizations})\), and object representation \((\text{Blatt Total score, OR+}, \text{ and OR- scores})\). A summary of the Rorschach results are presented in Table 9.

**Reality Testing**

In relation to reality testing, no statistically significant differences were found in the \(X+\%)\) score of the three groups. This suggests that for the three groups there were few differences in reality testing. Thus the hypothesis that ANs would have lower \(X+\%)\) scores, with the WP subjects having the highest \(X+\%)\) scores, was not confirmed. Mean \(X+\) scores for all three groups appear to be in the normal range, although
Table 9

Mean Rorschach Scores by Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Anorectic (n = 15)</th>
<th>Bulimic (n = 15)</th>
<th>Weight-Precocci (n = 15)</th>
<th>Exner Norms (n = 325)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M 18.0</td>
<td>18.8</td>
<td>19.9</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>SD 6.1</td>
<td>7.1</td>
<td>6.7</td>
<td>(5.1)</td>
</tr>
<tr>
<td>X+ %</td>
<td>M 80.3</td>
<td>80.0</td>
<td>76.0</td>
<td>.62</td>
</tr>
<tr>
<td></td>
<td>SD 12.6</td>
<td>10.9</td>
<td>12.1</td>
<td>(1.2)</td>
</tr>
<tr>
<td>Barrier %</td>
<td>M 37.4</td>
<td>31.3</td>
<td>29.7</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>SD 19.2</td>
<td>11.6</td>
<td>12.1</td>
<td></td>
</tr>
<tr>
<td>Penetration %</td>
<td>M 14.9</td>
<td>15.4</td>
<td>12.4</td>
<td>.47</td>
</tr>
<tr>
<td></td>
<td>SD 8.5</td>
<td>11.5</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Human %</td>
<td>M 34.4</td>
<td>36.9</td>
<td>32.6</td>
<td>.31</td>
</tr>
<tr>
<td></td>
<td>SD 8.5</td>
<td>20.0</td>
<td>14.7</td>
<td></td>
</tr>
<tr>
<td>Total OR</td>
<td>M 12.88</td>
<td>11.95</td>
<td>9.54</td>
<td>6.08**</td>
</tr>
<tr>
<td></td>
<td>SD 2.6</td>
<td>2.9</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>OR+</td>
<td>M 14.17</td>
<td>12.82</td>
<td>9.82</td>
<td>6.81**</td>
</tr>
<tr>
<td></td>
<td>SD 3.1</td>
<td>3.0</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>OR-</td>
<td>M 7.52</td>
<td>5.20</td>
<td>5.35</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>SD 5.6</td>
<td>4.5</td>
<td>4.9</td>
<td></td>
</tr>
</tbody>
</table>

**p < .01.

aNote. The data for these norms are from A Rorschach Workbook for the Comprehensive System (p. 61) by J.E. Exner, I.B. Weiner, W. Schuyler, 1976.
the WP group is slightly lower. **Ego Boundaries**

**Barrier and Penetration.** It was hypothesized that ANs would have the highest percent of Barrier scores followed by BULs and then WP subjects (AN > BUL > WP); and that BULs would have the highest percent of Penetration scores followed by ANs and then WP subjects (BUL > AN > WP). This hypothesis was also not confirmed as no group differences were found on either measure. However, these data did show a slight trend in the hypothesized direction for the Barrier scores. Insignificant findings for Barrier scores may well relate to the fact that all three groups seemed to have a high percent of Barrier scores. In addition, all three groups had large standard deviations suggesting much heterogeneity in the three groups.

**Thought Disorder.** It was hypothesized that ANs would score highest followed by BULs and then WP subjects on a total weighted deviant verbalization score that included contaminations (4), incongruous combinations (3), confabulations (2), and fabulized combinations (1). While this hypothesis was not confirmed as no statistically significant differences were found, a trend was shown for the Total deviant verbalization score, $F(2, 42) = 2.14$, $p < .10$, with the AN and BUL groups scoring similarly but higher than the WP group.

Subanalyses were performed on the individual categories using analyses of variances. No statistically significant differences were found for the three groups, however, a trend was found for the CONFAB score, $F(2.42) = 2.14$, $p < .10$, with the BUL group having more CONFAB scores.

A recent study by Lerner, Sugarman, and Barbour (1985) proposed an alternative conceptualization of deviant verbalizations that included
the following weighted categories: FABCOM (1), CONFAB Tendency (2), CONFAB (3), CONTAM Tendency (4), INCOM (5), and CONTAM (6). In addition these authors suggest that FABCOM responses represent boundary laxness, that CONFAB Tendencies and CONFAB responses represent inner/outer boundary problems, and that CONTAM Tendencies, INCOM, and CONTAM responses represent self/other boundary problems.

In light of this study, the deviant verbalization data were rescored to include CONFAB Tendency and CONTAM Tendency responses and reanalyzed in the following ways: (1) Frequency of responses in each of the six categories compared, (2) Total weighted deviant verbalization scores compared, (3) Three weighted subscores compared (boundary laxness, inner/outer, and self/other scores) and (4) Combined FABCOM-INCOM percent scores.

The results of all these analyses are shown in Table 10. The Exner norms (Exner, 1978) were included for comparison purposes in this table. None of these deviant verbalization scores for the three groups were significantly different. However, the weighted self-other and combined FABCOM-INCOM scores approached significance (Weighted Self-Other: $F(2, 42) = 2.46, p < .10$; Weighted combined FABCOM-INCOM: $F(2, 42) = 2.96, p < .10$) with the AN group scoring significantly higher than the WP group for both (Duncan Multiple Range Test, $p < .05$).

When the AN group was subdivided into restricting AN and bulimic AN subjects differences were found between the four groups, $F(3, 42) = 2.97, p < .05$, with bulimic ANs scoring higher than restricting AN and WP subjects on weighted self-other boundary scores (Duncan Multiple Range test, $p < .05$). Group differences were found for CONTAM scores,
Table 10

Rorschach Deviant Verbalization Scores by Group

<table>
<thead>
<tr>
<th>Deviant Verbalization Scores</th>
<th>Anorectic $(n = 15)$</th>
<th>Bulimic $(n = 15)$</th>
<th>Weighted Preoccupied $(n = 15)$</th>
<th>$F$ Value</th>
<th>Exner $^a$ Norms $(n = 325)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Self-Other</td>
<td>$M$ 7.47</td>
<td>$M$ 5.40</td>
<td>$M$ 2.73</td>
<td>2.40*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$SD$ 6.16</td>
<td>$SD$ 7.25</td>
<td>$SD$ 3.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTAM $M$</td>
<td>.27</td>
<td>.20</td>
<td>.07</td>
<td>.79</td>
<td>(0)</td>
</tr>
<tr>
<td></td>
<td>$SD$ .59</td>
<td>$SD$ .41</td>
<td>$SD$ .16</td>
<td></td>
<td>(0)</td>
</tr>
<tr>
<td>INCOM $M$</td>
<td>1.07</td>
<td>.73</td>
<td>.47</td>
<td>1.37</td>
<td>(.28)</td>
</tr>
<tr>
<td></td>
<td>$SD$ 1.16</td>
<td>$SD$ 1.10</td>
<td>$SD$ .64</td>
<td></td>
<td>(.20)</td>
</tr>
<tr>
<td>CONTAM Tendency $M$</td>
<td>.13</td>
<td>.13</td>
<td>.00</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$SD$ .35</td>
<td>$SD$ .35</td>
<td>$SD$ 0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted Inner-Outer $M$</td>
<td>1.00</td>
<td>3.73</td>
<td>1.07</td>
<td>2.10*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$SD$ 1.65</td>
<td>$SD$ 6.65</td>
<td>$SD$ 2.28</td>
<td></td>
<td></td>
</tr>
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* $p$ .10.

Note. The data for these norms are from A Rorschach Workbook for the Comprehensive System (p. 61) J.E. Exner, I.B. Weiner, W. Schuyler, 1976.
\( \text{E}(3, 42) = 2.97, p < .05, \) with the bulimic ANs scoring significantly higher than the restricting ANs and the WP group for this score (Duncan Multiple Range Test, \( p < .05 \)).

In summary, although initial analyses did not support the thought disorder hypotheses, post-hoc analyses provided some indication that anorectics and bulimics may have more problems with thought disorder than weight-preoccupied individuals. In addition, bulimics may tend to have more CONFAB scores than anorectics and weight-preoccupied individuals. Overall, anorectics seem to have more self-other ego boundary problems in general than do weight-preoccupied individuals. It appears that this self-other boundary difference may be attributable to higher CONTAM scores for bulimic anorectics suggesting bulimic anorectics may display the most severe kinds of ego boundary problems.

Object Representation

The results of the total OR, OR+, and OR- data are shown in Table 9 along with the other Rorschach data, and the results of the individual 19 categories are shown in Table 11. For this measure it was hypothesized that the AN group would have the lowest level of object representation (Total OR), followed by the BUL group and then the WP group.

The results of these data did reveal group differences in level of object representation, however the direction of the data was opposite of the hypothesized group direction with the AN group scoring the highest, followed by the BUL group and then the WP group, \( (F(2, 42) = 6.08, p < .01) \). Using the Duncan Multiple Range Test, significant differences were found between the two eating disordered groups and the WP group with no differences between the eating disordered groups \( (p < .05) \). These differences were also found for the OR+ group scores, \( F(2, 42) = 6.81, \)
Table 11 (continued)

Rorschach Object Representation Category Scores by Group

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<th>Category</th>
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(continued)
Table 11

Rorschach Object Representation Category Scores by Group

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Table 11 (continued)

Rorschach Object Representation Category Scores by Group

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*p < .10.    **p < .05.    ***p < .01.
However, no statistically significant differences were found for the OR- group scores. These results seem to suggest that ANs and BULs have higher levels of object representation than do WP subjects, and that these differences are related to more highly developed realistic internal object representations.

In order to determine specifically where these differences were occurring, one-way ANOVAs were performed for each of the 19 scoring categories of the Blatt OR system. Three scores were compared for each category: Total OR, OR+, and OR-. The results of these data are listed in Table 11.

The results of these additional analyses indicated that for Total OR scores, the AN group scored significantly higher for Unmotivated action and the BUL group scored significantly higher than the WP group on Incongruent Object-Action Interaction, and for Malevolent Action responses (Duncan Multiple Range Test, $p < .05$). In addition, the BUL group showed a trend for more Reactive action responses than did the AN or the WP groups. For OR+ scores, the AN Group scored significantly higher than the WP group on Unmotivated Action responses, and the BUL group scored higher than the WP group for Active-Reactive Interaction responses.

In summarizing these data on object representation, it appears that overall, the WP subjects had lower levels of object representation. More specifically, ANs had more unmotivated action and BULs had more active-reactive interaction patterns than WP subjects for accurately perceived humans. However, BULs also showed more incongruent and malevolent interactions overall. In general, WP subjects gave less articulated action and interaction responses compared to eating disordered
subjects. However, when subjects did articulate more action and inter-
action, eating disordered patients did so at a more primitive level. 
Thus, while AN and BUL subjects tended to have more fully developed
internal object representations, these introjects tended to be differen-
tiated in more primitive ways and may not reflect higher internal object
representations.
CHAPTER V

DISCUSSION

The purpose of the present study was to compare three types of eating pathology (anorectic, bulimic, and weight-preoccupied individuals) on depression and personality organization. Based on prior research, it was hypothesized that the bulimics would be the most depressed, and that the anorectics would have the most difficulties with reality testing, ego boundaries, thought disorder, social adjustment and object relatedness. It was also believed that the weight-preoccupied individuals would be the least depressed and have the fewest personality problems and the highest level of social adjustment.

Depression and Eating Pathology

The conclusion reached in this study is that there does indeed appear to be a consistent and distinct relationship between depression (diagnosis, severity, and frequency) and eating disorders. Based on the results from depression measures in this study, it was found that both eating disordered groups were frequently depressed and more severely depressed than the Weight-Preoccupied group, with bulimic Anorectics showing signs of being more chronically depressed than the other groups.

Although the Weight-Preoccupied group in general appeared much less depressed than the two eating disordered groups, when compared to Stuckey's (1981) group of normal eaters, they seemed to be mildly
depression. Severity of eating pathology and depression thus seem to be closely related phenomena. These data suggest that while weight-preoccupied individuals are less depressed than eating disordered individuals, they tend to be more symptomatic than those not preoccupied with their weight. Thus, weight preoccupation should be perceived as a psychological symptom which may be related to other psychological problems such as depression.

The depression profiles of the Anorectic and Bulimic groups revealed some distinct subgroup differences and similarities. On the Multiscore Depression Inventory, Pessimism, Sad Mood and Learned Helplessness subscales commonly described both groups. This suggests that both anorectics and bulimics experience intense feelings of sadness and hopelessness, and feel unable to effectively cope with life's problems, perceiving others and themselves as barren, helpless, and depleted. This kind of passive helplessness is often associated with anaclitic depression, and suggests that depression in anorexia and bulimia may well have an anaclitic component. Eating disordered individuals also seem to feel hopeless and discouraged about themselves, others, and their future, and seem to suffer from fatigue and a lack of energy.

Patterns of scores elevated in the depressed range suggest that anorectics may suffer from more cognitive confusion, poor concentration, and indecisiveness, with a tendency to be more socially withdrawn and isolated. Problems in social functioning were also confirmed from high Social Adjustment Scale scores further indicating impaired social adjustment for anorectics. Patterns of most elevated depression scores for bulimics suggest that by comparison, bulimics may feel more guilt-ridden. This suggests that bulimics may be more likely to feel overly
responsible for things that go wrong, may be regretful of their actions, and feel more self-hatred and worthlessness.

Previous research has documented depression prevalence rates from 5% to 85% in anorectics and from 35% to 77% in bulimics. The present study supports these data, indicating higher rather than lower incidence rates for anorectics (both restricting and bulimic) and bulimics. In addition, this study provided previously unknown findings on the relationship between depression and weight preoccupation. Overall, the data from this study support a continuum understanding of the relationship between eating pathology and depressive feelings with normal eaters at one extreme, anorectics and bulimics at the other extreme, and weight-preoccupied individuals falling in the middle.

In previous studies on eating disorders, it has been suggested that depressive symptoms are merely a result of the physiological effects of severe weight loss and purging. The patterns of results in this study, however, does not appear consistent with a physiological explanation. Weight loss was only found to be significantly correlated to low energy level (MDI-EL) and not to the other depression measures ($r = .28, p < .03$) The pervasiveness of the depressive feelings reported by eating disordered subjects in this study is also consistent with a psychological relationship. This is also supported by higher than expected incidence rates of depression in the Weight-Preoccupied group compared data reported for normal eaters (Stuckey, 1981). This group of subjects were not engaged in self-starvation, binge eating or purging, and were not currently at anorectic weight levels. Thus, a physiological model does not provide any explanation of why these individuals would be more often depressed since this group of subjects did not have
any of the medical difficulties frequently associated with eating disordered symptoms.

From a psychodynamic perspective, depression in eating disorders seems to contain both anaclitic and introjective themes. Anorectics appear to report more anaclitic-like depressions with bulimic anorectics best fitting this picture (as evidenced from high Learned Helplessness scores and less elevated Guilt scores), while normal weight bulimics seem to report both anaclitic and introjective depressive themes (as evidenced by high Learned Helplessness and Guilt scores). These findings replicate and expand on Stuckey's (1981) findings which showed the prominence of introjective over anaclitic depressive themes in normal weight bulimic purgers (BPs) compared to non-purging bulimics and normal eaters.

In 1981, Stuckey found that bulimic purgers (BPs) were significantly more depressed than bulimic restrictors (BRs) and normal eaters (NEs). On the Multiscore Depression Inventory Stuckey found Guilt, Cognitive Difficulty, Learned Helplessness, and Sad Mood to be in the depressed range for the BP group, with Learned Helplessness being the highest scale score.

Overall, this study showed the same Multiscore Depression Inventory scores to be elevated in the depressed range in both studies, with the exception of Cognitive Difficulty (not elevated in Stuckey's study). In addition, this study found Pessimism and Energy Level (low) to be elevated. While the bulimics in this study appeared more depressed overall than Stuckey's study, this is not surprising as bulimic volunteers were used for this sample, while primarily inpatients and outpatients were used here. One would expect inpatients to be more sympto-
matic than a volunteer sample. In both studies Learned Helplessness was the highest score, followed by Sad Mood, and then Guilt for purging normal weight bulimics.

Both studies showed elevated Learned Helplessness and Guilt scores indicating depression in bulimia has both anaclitic as well as introjective themes. Stuckey commented on the difficulty of quantifying feelings of anaclitic depression. She suggested that high Learned Helplessness scores indicate that bulimics may feel empty, barren, and helpless, but that this might reflect a more introjective sense of responsibility and guilt for these helpless feelings. She concluded that, "these items describe the helplessness component of an anaclitic depressive experience, but do not address the more interpersonal component, that is, the intense desire for symbiotic attachment and consequent great vulnerability of feelings of abandonment" (p. 104).

A word of caution concerning the depression data should be noted in interpreting the results presented here and their implications. While the majority of subjects were distinctly depressed, this was not true of all subjects. Conclusions drawn here were based strictly on group data and within each group there was some heterogeneity. This caution particularly relates to the Weight-Preoccupied group where a higher than expected incidence of depression was found. It should be noted that while this was true, most of these subjects were not depressed. Thus while there appears to be a relationship between eating pathology and depression, this does not imply that all eating disordered individuals or that all weight-preoccupied individuals are depressed.
Social Adjustment Scale

The Social Adjustment Scale results in the present study showed statistically significant differences between the three groups with anorectics scoring higher than weight-preoccupied subjects on Total, Work and Family score. Interestingly, all three groups seemed to score higher than a group of normal women reported by Norman & Herzog (1984). In addition, both anorectics and bulimics scored very similarly to a group of acutely depressed women also reported by Norman & Herzog (1984), with the exception of bulimics scoring lower than depressed women on the Family scale. The Weight-Preoccupied group appeared to score lower than this depressed group on all three subscales as well as the Total scale score, but higher than the normal group. For the Family scale score all three groups appeared similar, while all three groups scored higher than the normal group.

These data suggest that impaired social adjustment, particularly in the area of extended family, may exist for individuals with disturbed eating pathology. The similarity between depressives and eating disordered groups and the high degree of depression in eating disorders suggests that perhaps depression may be an important factor in understanding the relationship between social maladjustment and eating pathology. Once again it appears that while weight-preoccupied individuals have less impaired social adjustment than anorectics and bulimics, they too clearly have problems in this area, particularly in the area of socialization and leisure activities.

Johnson & Berndt (1982) have suggested that impaired life functioning in bulimics may be due to "progressive involvement in the chaotic eating" (p. 7). While this may be a variable in increasing social
malfunctioning in eating disorders, the problematic social adjustment of weight-preoccupied individuals who are not involved in chaotic eating patterns suggests a more psychological explanation for this relationship. Norman & Herzog's (1984) findings of persistent social maladjustment in bulimics despite one year of treatment, also supports the existence of another variable in this relationship.

It should also be noted that bulimics in the present study appeared to have higher levels of social maladjustment than either the Johnson & Berndt (1982) or the Norman & Herzog (1984) study. This is best explained by the significant number of hospitalized bulimics used in this study. Presumably the bulimics in this study had more severe psychopathology and symptomatology than previous studies.

In comparison to Thompson & Schwartz's (1982) study using the Social Adjustment Scale with anorectic and anorectic-like subjects, the Weight-Preoccupied group in this study reported more significant impairment. This seems best explained by the more stringent selection criteria used here. Thompson & Schwartz's anorectic-like group consisted of normal weight women with Eating Attitude Test scores equal to or greater than 25, whereas in the present study high Drive for Thinness scores on the Eating Disorder Inventory were also required. This added selection scale criteria is especially effective for identifying individuals who are overly preoccupied with weight and dieting. Thus, it is believed that the Weight-Preoccupied group in the present study may be somewhat more disturbed in this as well as other areas as compared to those in earlier studies.
Personality Organization

The results of the Rorschach data in this study appear to be consistent with other studies in this area, and additionally provide a more comprehensive picture of personality organization in eating disorders. In general, these data provided support for hypotheses concerning borderline kinds of weaknesses in anorectics and bulimics, with Rorschach protocols indicating intact reality testing, ego boundary deficits, and problems in object relatedness.

Reality Testing

On the Rorschach Test, no statistically significant differences between groups were found for the X+ percent scores. In addition, none of the groups differed significantly from Exner's non-psychiatric norms on this variable. This suggests that anorectics, bulimics, and weight-preoccupied individuals do not show significant problems with reality testing compared to normals.

The finding of intact reality testing for eating disordered individuals is consistent with both clinical and research findings. While some professionals have speculated about the relationship between psychosis and anorexia, most have come to see the majority of anorectics as having more intact reality testing. While it was believed that eating disordered individuals might show lower reality testing than weight-preoccupied individuals, this did not appear to be the case in this study.

These data, when combined with the other findings in the present study, are also consistent with typical borderline profiles, which usually are identified by intact reality testing but significant problems in ego boundaries, thought disorder, and object relatedness. Thus, whatever personality problems exist for these individuals, for the most
part, eating pathology does not appear to be typically characterized by poor reality testing.

Body Boundaries

In terms of body boundaries, no significant differences were found among the three groups for the Barrier and Penetration scores. While anorectics tended to have higher Barrier scores, this difference was not statistically significant, perhaps due to heterogeneity within groups.

When the results of the Barrier and Penetration scores were compared to Strober & Goldenberg's (1981) data, all three groups in the present study scored much higher than their group of anorectics and depressed controls. In addition, compared to Olsen, Legg & Stiff's (1982) study the anorectics, bulimics, and weight-preoccupied subjects in the present study received many more Barrier scores than their group of normals. For the Penetration scores there were no differences between the three groups in this study and between Strober & Goldenberg's two groups. Also, normals in the Olsen et al study scored similarly to the three groups in the present study on Penetration scores.

Fisher (1970) links increased Barrier scores to increased need for self-protection and "security against outside threat" (p. 314). He proposes that with "increasing boundary definiteness a person can more clearly see himself as an individual possessing differentiated identity and can act in a more autonomous "self steering fashion"" (p. 305). In terms of psychopathology, Fisher discusses the positive relationship between Barrier scores and grandiosity. He speculates that the "feeling of being special or important gets translated into boundary definiteness" (p. 279).

It has been well documented that the intense need for control,
self-protection, attention and specialness approaching grandiose proportions, are prominent themes for anorectics and bulimics. In addition, several psychodynamic theorists have highlighted the intrusive and controlling nature of the parents of anorectics and bulimics resulting in specific developmental weakness in separation/individuation stages of psychological development.

The results of the present study showed a trend for higher Barrier scores for anorectic over weight-preoccupied subjects. Compared to other studies, all three groups appeared to have highly elevated Barrier scores. These findings suggest tenative support for a relationship between heightened Barrier scores and eating pathology. Abnormally elevated Barrier scores in eating disordered patients, particularly anorectics, seem to support Fisher's theoretical claims. Heightened Barrier scores for all three groups in this study would seem to reflect repeated unsuccessful and desperate attempts to erect a protective shield against parental control and intrusion in an effort to move towards autonomous and independent psychological functioning and self differentiation.

Thought Disorder

In relation to thought disorder, the results of this study showed a trend for anorectics and bulimics to have higher weighted deviant verbalization scores using four categories (FABCOM, CONFAB, INCOM, CONTAM) and for anorectics to have a higher combined INCOM-FABCOM score as compared to the Weight-Preoccupied group. For the Anorectic group, the weighted self/other boundary score was significantly higher than for the Weight-Preoccupied group. Within the Anorectic group, bulimic anorectics scored significantly higher than restricting anorectics and weight-preoccupied subjects on weighted self/other boundary scores.
This is attributable to higher CONTAM scores for bulimic anorectics. Bulimics tended to have the highest number of inner/outer boundary problems due to higher CONFAB scores. Thus, it appears that anorectics may have more significant problems with ego boundaries than do weight-preoccupied subjects, particularly self/other boundary problems, with bulimic anorectics showing the most severe kinds of thought disorder.

Compared to the Exner non-psychiatric norms for FABCOM, INCOM, and CONTAM scores, both bulimic anorectics and normal weight bulimics seemed to have more CONTAM scores and bulimic anorectics seemed to have more INCOM scores. This further suggests support for more serious self/other boundary problems for bulimic anorectics and some less serious but significant self-other boundary problems for bulimics as compared to normals. In addition, the Weight-Preoccupied group data suggests an absence of significant thought disorder when compared to normals.

Lerner, Sugarman & Barbour (1985) compared neurotic, outpatient borderline, inpatient borderline, and schizophrenic patients on a six point thought disorder scale consisting of FABCOM (mildest), CONFAB Tendency, CONFAB, INCOM Tendency, INCOM, and CONTAM (most severe) responses. The results of this study showed schizophrenics to have the most CONTAM scores while inpatient borderlines had the highest number of CONFAB scores. Both the Anorectic and Bulimic groups received CONTAM scores similar to Lerner et al's inpatient borderline group, with scores higher than neurotics and lower than schizophrenics. In addition, the Bulimic group received CONFAB scores falling approximately in between the outpatient and inpatient borderline group scores. The Weight-Preoccupied group appeared to score similarly or lower than their neurotic group on all of the six boundary scores.
Problems in self/other boundaries have been theorized as related to deficits in the symbiotic and early separation-individuation sub-phases where self and other have not become sufficiently differentiated. From a psychodynamic perspective schizophrenia is seen as a developmental arrest traceable to the symbiotic phase.

Inner/outer boundary loss is typically related to deficits in the separation/individuation phase of development where inner and outer experiences are not sufficiently differentiated. Lerner et al (1985) have suggested that CONFAB responses represent a "blurring of fantasy-reality distinctions" (p. 59). These authors further propose that borderline psychopathology exists as an entity separate from schizophrenia and characterized by inner/outer boundary problems arising from failures in the separation/individuation phase. They further suggest that borderline pathology exists on a continuum "involving a spectrum of dysfunctioning" (p. 59). Borderlines as a group, seem to have more problems "integrating their affects with thought and, as a result, experience difficulty in controlling and modulating emotional expression" (Sugarman, 1980, p. 44).

Lerner et al (1985) suggest that "while the borderline is capable of mentally representing the separateness of self from other, this differentiation is precarious and subject to distortion (excessive elaboration), so that the other is experienced as possessing regulatory capacities and emotions that should lie within the self-representation" (p. 61). Borderlines' inner/outer boundary problems are believed to be related to their "inability to integrate positive and negative emotional experiences" which "predispose them in difficulties with affective organization" (Sugarman, 1980, p. 44).
In discussing borderline pathology, Lerner et al (1985) point to depression and paranoid ideation as common features of both borderline and psychotic states. These authors quote Sugarman (in press) as explaining this commonality as related to a state where "subjective concerns override and intrude into one's perceptions and interpretations of the objective" (p. 62). Sugarman feels that these preoccupations serve a transitional object function where the individual attempts to 'avoid his own inner barrenness and protect himself from a more serious regression' (p. 62). Thus, these feelings serve to defend against loss of self/other boundaries.

In summary, what these authors seem to be proposing is that borderline psychopathology can be differentiated from schizophrenia primarily by the type of boundary disturbances manifested. While schizophrenics show serious loss of self-other boundaries, borderlines show only transient self-other boundary loss and are more typified by inner/outer boundary problems. As such, borderlines have significant difficulties with modulating affective states, integrating positive and negative affects, and differentiating internal from external states and, as shown in the CONFAB response, they tend to "override external reality with (their) own affective collorations of it" (Sugarman, 1980, p. 43).

In interpreting the results of the thought disorder data in the present study, the distinctions and manifestations of psychotic and borderline disturbances on the Rorschach become highly relevant. The results of this study, while only tentative, seem to suggest that both anorectics and bulimics may suffer transient self/other boundary loss similar to individuals suffering from borderline pathology. Bulimics in particular seem to show the inner/outer boundary loss often described in
borderlines. In comparing bulimic anorectic and restricting anorectics, bulimic anorectics appear to have more serious kinds of self/other boundary problems.

These findings seem to suggest that for the most part, anorectics and bulimics may be understood as falling on the borderline continuum of personality organization in relation to boundary disturbance. However, while most anorectics and bulimics did show evidence of significant thought disorder, not all did, suggesting that borderline personality weaknesses may be particularly more relevant for a subgroup of eating disordered individuals.

Bulimic anorectics in the majority of cases may tend to have more disturbance in boundary loss, but this loss does not appear severe enough to consider this group as distinctly psychotic. Bulimia in anorexia may be hypothesized as representing more severe borderline pathology than restricting anorexia or bulimia in normal weight individuals. Restricting anorectics appear to have less severe self/other boundary loss than bulimic anorectics and do not appear to suffer from as many inner/outer boundary problems. Bulimics seem to have some transient self/other boundary problems, like restricting anorectics, but unlike anorectics have significant inner/outer boundary problems. Weight-pre-occupied individuals, unlike anorectics and bulimics, appear to have more intact ego boundaries.

In speculating about personality organization in eating disorders, the results of the present study tentatively suggest that anorectics, while not psychotic, may have more ego boundary weaknesses perhaps related to problems in the early separation-individuation subphases. Following this line of thought, bulimics, along with some earlier sub-
phase deficits, may show more difficulties which have been theorized as related to later separation/individuation substages. However, further investigation in this area needs to be done to clarify these possibilities. In summary, while not all anorectics and bulimics showed evidence of thought disorder, when they did, their problems seemed to most resemble the kinds of problems described in individuals with borderline personality organizations.

Object Representation

The results of the present study showed anorectics to have the highest level of Blatt's Object Representation score, for the Total OR score as well as the OR+ score. Bulimics followed next and then the Weight-Preoccupied group, with weight-preoccupied subjects scoring significantly lower than anorectics and bulimics.

A comparison of the 19 categories that make up the composite Blatt scores indicated that on the Total OR score anorectics scored significantly higher than weight-preoccupied subjects on Unmotivated action, and bulimics scored significantly higher than the Weight-Preoccupied group on Incongruent object-action integration and Malevolent action. For the OR+ score, the anorectics scored significantly higher than the WP group on Unmotivated action, and the bulimics scored significantly higher than the Weight-Preoccupied group on Action-Reaction interaction patterns.

Since no data on normal subjects was collected in this study, a comparison of the data presented here to normal groups from other studies, may prove helpful. Thus, the following discussion represents an attempt to provide some speculations and possible explanations for the results found in this study, as well as generating some hypotheses to be
tested in future research. These speculations must be treated cau-
tiosly, however, because one cannot be certain that normal controls from
other studies truly represent a normal sample.

In 1976, Blatt, Brenneis, Schimek, and Glick published a study
comparing a normal (nonpsychiatric) group (n = 37) to hospitalized psy-
chiatric patients (n = 48). Of the three groups in the present study,
the Weight-Preoccupied group tended to look very similar to Blatt et
al's group of normal subjects. Although direct comparison is not possi-
ble, all three groups in the present study seemed to have fewer accu-
rately perceived whole human responses and more accurately perceived
quasi-human detail and benevolent responses. For inaccurately perceived
humans, all three groups seemed to have more No Action, and Action-Ac-
tion interaction responses. This suggests that while unrealistic inter-

tnal objects are probably adequately developed, when confronted with
reality, their object representations may tend to be on a more part-ob-
ject level where others often seem to be perceived as extensions of
themselves rather than as people with separate thoughts, feelings and
experiences. In addition, others tended to be perceived as more kind
and benevolent, perhaps indicating a hypersensitivity to affect in gen-
eral.

Anorectics and bulimics appeared to score higher than Blatt et
al's (1976) normal group on Perceptual Articulation and Nonspecific
Integration between object and action for both realistic and unrealistic
percepts. Greater articulation suggests that internal objects, whether
reality based or not tend, are more physically detailed. This fits well
with clinical descriptions of hyperawareness, particularly of physical
attributes and appearance of self and others. Interestingly this seems
to be carried over into fantasy as well and may tend to become manifested in body image problems and hypersensitivity.

More realistic and unrealistic Nonspecific action responses for anorectics and bulimics suggest that specific intentions in relationships may have been experienced as unclear or absent. The lacking in a sense of causality in relating may perhaps translate into the prevalent feelings of non-connectedness, meaninglessness and emptiness felt in relationships. Hilda Bruch (1973) has commented at length on this phenomena. She points to the anorectic's inability to correctly read internal states such as fatigue and hunger and relates this to the mother's responding to her own schedule rather than the infants, thus leading to an inability to discriminate or gain causal understanding of internal states.

Unlike bulimics and weight-preoccupied individuals in the present study, anorectics tended to score higher than Blatt et al's (1976) normal group on realistic Unmotivated action and unrealistic Functional articulation. The literature suggests that Unmotivated action responses may represent a lack of motivation or reason for action and is similar to the Nonspecific response. These can also be seen as depressive responses. Following this line of thought it can be speculated that for anorectics, realistic relationships may have a depressive but non-malevolent quality to them.

When compared to Blatt et al's (1976) normal group, bulimics, unlike anorectics and weight-preoccupied subjects appeared to have more Reactive and Intentional Action as well as more accurately perceived Malevolent interaction responses. This would seem to support clinical descriptions of bulimics as more emotionally volatile, impulsive, reac-
tive, and destructive in realistic interactions. However, unlike the anorectics, they seem to have a more highly developed sense of causal-
ity. Thus, while the nature of their realistic interactions tend to be more highly developed, they also seem more aggressively and destruc-
tively charged. In general, they seem particularly sensitive to the emotional states of others.

Weight-preoccupied subjects appeared most similar to Blatt et al's normal group. This was true with the exception of having less well developed human representations. Thus, while overall their internal object representations appeared to be more adequately developed than for eating disordered individuals, like anorectics and bulimics they too seem to experience others on a more part-object developmental level.

Overall, all three groups appeared to show developmentally lower levels of realistic human representation suggesting a more part-object level of development. Once again, it must be stressed that this obser-
vation is made cautiously because it is based on comparison to normal controls from another study. Both eating disordered groups seemed to have generally more accurately perceived action responses and weight-
preoccupied subjects and all three groups had more unrealistic action responses than has previously been noted in normal, non-weight preoccu-
pied individuals. More action responses for eating disordered patients may be related to the often seen hyperactivity and manic-like behavior of both anorectics and to a lesser extent bulimics. In addition, it appears that eating disordered individuals in general may have a more highly active fantasy life. Further research is necessary to investi-
gate these speculations.

From a theoretical perspective, the kinds of action responses that
were elevated for anorectics suggest that their high activity level may act to defend against and drown out feelings of emptiness, non-connect- edness, and anaclitic helplessness. Bulimics' elevated action respon- ses suggest that their high activity level may be an attempt to dis- charge tension and gain control of overwhelming affect as well as feelings of anaclitic helplessness. The results of this study suggest that majority of bulimics may have more difficulty modulating affective states, are more easily flooded by feelings, and have had more emotion- ally volatile and negatively charged early parental objects.

**Borderline Personality Organization and Eating Pathology**

The results of the present study are consistent with previous psy- chodynamic connections made between eating disorders and borderline per- sonality organization. Like the borderline patient, the majority of anorectics and bulimics in the present study showed no impairment in reality testing except around specific conflictual issues. Personality organization in individuals with severe eating disorders may be specu- lated as mostly falling within the borderline spectrum, with different eating disordered subgroups perhaps corresponding to different borderline character styles.

Kernberg (1972) has organized Mahler's developmental phases into four stages of self-other development. The second stage includes Mah- ler's symbiotic phase along with differentiation and practicing sub- phases of separation-individuation. In this stage there is a begin- ning differentiation between self and nonself but others are seen as "extentions of this amorphous center, and are termed 'part objects' because they are only fragments of other people" (Smith, 1980, p. 63).
This stage has also been linked to the paranoid-schizoid positions of Kleinian theory.

Kernberg's third stage includes Mahler's rapprochement subphase of late separation-individuation. From a Kleinian view, this includes a movement from the paranoid to the depressive position. During this stage, self and nonself further differentiate and "fixations at this stage of development are thought to result in borderline ego functioning" (Smith, 1980, p. 630). Thus, at this stage the individual struggles with good and bad aspects of the self and other as well as with consolidation of self-other representations.

Kernberg's stages are helpful in understanding the spectrum of self-other and inner-outer boundary development in relation to psychotic and borderline structures, character styles within these structures, and in speculating about eating pathology. Basically, the results of this study seem to suggest that bulimic anorectics may have the most severe self-other boundary problems followed by restricting anorectics and then bulimics. Bulimics, unlike anorectics, tended to have more inner/outer boundary problems. This suggests that anorectics and bulimics may both have some significant weaknesses perhaps traceable to the later part of Kernberg's second stage, but not to psychotic proportions, suggesting possible separation-individuation problems at the differentiation and/or practicing subphases. In addition, bulimics may be hypothesized as having problems suggesting deficits in the rapprochement subphase (Kernberg's third phase) with this being the primary area of difficulty.

The seemingly heightened Barrier scores of anorectics and to a lesser extent bulimics, also supports a possible relationship between borderline organization and eating pathology. It has been proposed that
heightened Barrier scores reflects paranoid ideation, grandiosity, and a strong need to protect the self and gain control. Sugarman (1980) commented that "borderlines often show a developmental trauma or fixation at the paranoid stage of development" (p. 47). Likewise, strong depressive features have also been referenced as hallmarks of borderline pathology. In addition, it has been speculated that paranoid ideation may act as a "defense against underlying anaclitic or introjective depressive issues" (Sugarman, 1980, p. 28).

It has been proposed that anorexia may represent a disorder midway between Klein's paranoid and depressive positions. The Barrier and thought disorder data provide tentative support for this conceptualization. Furthermore, these data seem to suggest that anorectics may tend to fall slightly more towards the paranoid end, while bulimics may fall more toward the depressive end of this spectrum.

Along with significant ego weaknesses, anorectics and bulimics in this study also appeared to have difficulty with affective organization. Sugarman (1980) explains the lack of affect organization in borderlines as reflecting a lack of integration in "positive and negative emotional experiences" (p. 47). Difficulties with anxiety, aggression, and depression all fall under the area of affect organization.

Sugarman (1980) points out that both anaclitic and introjective depression can be found in borderlines, but that borderlines with an introjective depression may be "closer to the neurotic end of the spectrum than those who show an anaclitic depression" (p. 27). The results of the present study underscore the significant relationship between depression and eating pathology. Depression, particularly with an anaclitic component, was found to be a common problem for many anorectics.
and bulimics. While both anaclitic and introjective depressive themes were prominent, the results of this study tentatively suggest that anorectics may have somewhat more anaclitic and bulimics somewhat more introjective depression themes. If this is the case, bulimics as a group may be understood as falling more toward the upper end of the borderline continuum with respect to affect organization.

Constricted affect and denial of depression despite depressive themes and overt symptoms are also seen as an impairment in affect organization. These types of borderlines "strive to contain all affective expression" because they fear being overwhelmed by feelings (Sugarman, 1980, p. 45). This is compared to borderlines who present as affectively labile and flooded by feelings.

Overall, anorectics are seen as more constricted and inhibited while bulimics are seen as more extroverted and emotionally labile. The results of the Social Adjustment Scale, depression, and object representation data support these clinical and research findings. These findings are also consistent with understanding anorexia and bulimia as often representing slightly different but overlapping character styles on the borderline personality organization continuum. While not all anorectics and bulimics may have a borderline level of personality organization, these data seem to suggest that this may be true for a significant subgroup of eating disordered individuals, particularly for those whose symptoms are sufficiently severe to warrant hospitalization. Thus, while eating disordered patients may exist on a continuum of personality organization ranging from psychotic to neurotic, many may appear to have borderline personalities, or at least some significant pre-oedipal weaknesses possibly related to deficits in the separation-
individuation phase of development.

Smith (1980) points out that hyperalertness is often mistaken for empathic relating in the borderline. This is distinguished by the prevalence of painful relationships as opposed to "cooperative, mutually supporting or "sharing" interaction(s)" reflected in those capable of "accurately detecting another's feelings" (p. 83). Thus, borderlines show "a more projective rather than empathic tendency" (p. 83).

These characteristics were also suggested in the present study. While overall object representation scores showed internal objects to be highly articulated and differentiated for both anorectics and bulimics, this finding was misleading. More detailed analyses of the quality of these representations tended to be consistent with the pathological object relations often seen in borderlines. What could easily be mistaken for empathic and differentiated introjects rather seemed to represent hyperalertness, lack of connectedness, helplessness, and meaninglessness in relationship. In addition, high activity levels may represent an attempt to defend against and mask underlying feelings of anaclitic depression and pathological early object relations.

Additional findings suggested that anorectics may have more depressed internalized objects and a poorer sense of causality in relationships. By contrast, bulimics seem to have introjected more aggressive and punitive objects. Their object world can be construed as more emotionally volatile and painful while the object world of the anorectic seems more barren, meaningless, and lacking in connectedness and causality.

Weight-preoccupied individuals seem to have some similar but less extreme problems than anorectics and bulimics in this study. Like eat-
ing disordered patients, weight-preoccupied individuals showed adequate reality testing. Weight-preoccupied individuals as a group, however, tended to more resemble neurotics and normals. They displayed only mild self-other and inner-outer boundary problems, and although somewhat more depressed than normals, they tended to show better affect organization. In addition, they reported only mild impairment in social functioning. While in general their internal object representations appeared most like normals, like anorectics and bulimics, weight-preoccupied subjects did appear to have less highly differentiated realistic human percepts.

Overall, these findings suggest that while weight-preoccupied individuals seem to have similar depression patterns and personality weaknesses, these problems seem quantitatively less severe. Weight-preoccupied individuals only resembled anorectics and bulimics in the kinds of pre-oedipal weaknesses manifested, especially their tendency towards less well differentiated introjects where others are viewed as part objects and as extensions of themselves. This particular kind of profile seems more consistent with a narcissistic-neurotic level of personality organization. Thus, weight-preoccupation seems to fall on the upper end of the personality organization spectrum in relation to the eating disorders continuum.

**Limitations and Implications**

The results of the present study should be interpreted conservatively. To begin with, the sample sizes in this study are small and include both males and females. This is particularly problematic in interpreting comparisons between bulimic anorectics and restricting anorectics. However, it should be noted that few other studies have used
larger sample sizes in comparing subgroups of eating disorders particularly on projective tests which are time consuming to administer and interpret. In addition, the inclusion of a Weight-Preoccupied group in this study was highly contributory and enlightening in confirming hypotheses about this group of individuals as well as understanding further the eating disorder continuum.

An additional problem with this study was that the majority of bulimics and all of the anorectic subjects were hospitalized patients. While it is common practice to use hospitalized anorectics for this kind of research, this is rarely the case for normal weight bulimics who are typically treated on an outpatient basis or who volunteer for such projects. Thus the use of hospitalized bulimics to make up the bulimic group in this study may have resulted in a more severely disturbed group than is typically reported. The bulimic group data therefore may be more representative of the more severe end of the bulimia spectrum. On the more positive side, the bulimics used in this study clearly suffered significant bulimic symptoms and there was little doubt as to whether or not they were truly bulimic or only occasionally symptomatic.

To provide clarification for the results reached in this study, future research must examine individuals with less severe eating disordered symptoms to determine if a consistent dynamic pattern really exists. It is possible that anorectics and bulimics used in the present study may represent a more severely disturbed population in general where eating pathology may be just one part of more complex and chronic psychopathology.

In comparison to the weight-preoccupied subjects used in this study to other studies, those in the current study more accurately rep-
resented weight preoccupation. Many of the early studies included bulimics in their 'anorectic-like' groups which makes conclusions drawn uninterpretable. One of the few comparable studies was Garner et al's 1984 study. This study identified two subgroups within their Weight-Preoccupied group: "subclinical" anorectics and "normal dieters". This first subgroup scored in the anorectic range on all Eating Disorder Inventory scales, while the second subgroup showed only elevated Drive for Thinness, Body Disatisfaction, and Perfectionism Eating Disorder Inventory scale scores.

The weight-preoccupied subjects in the present study received elevated scores on the Drive for Thinness and Body Disatisfaction scales and slight elevations of the Perfectionism scale but on none of the other Eating Disorder Inventory scale scores, suggesting that this group is most similar to Garner et al's "normal dieter" group. The results of Garner et al's study further suggested that future research include both a group of subclinical anorectics as well as normal dieters to complete the eating disorder spectrum. The design of the present study was a beginning attempt to do this and the results of this study have provided a more comprehensive picture on the relationship of "normal dieters" to other kinds of eating disorders beyond the scope of the Eating Disorder Inventory.

Additional limitations of the present study relate to generalizability and interpretation of findings. It should be emphasized that the conclusions drawn here related specifically to group data and not to individuals within these groups. While generalizations about personality organization and depression in eating disorders may be reflective of the majority, it does not necessarily reflect each individual subject.
Thus, while there is a tendency for anorectics and bulimics to be significantly depressed and to show evidence of borderline personality organizations, this was not true for all anorectics and bulimics. Within each group there were individuals who did not fit the group profile.

Finally, it should be noted that certain assumptions were made in the present study concerning the construct validity of all dependent measures. The leap from quantitative data to psychodynamic theory must always be made conservatively and cautiously. Whether in fact measures such as Blatt's object represenation scoring system do indeed measure such theoretical constructs remains unknown. However, continued refinement and work in this area will undoubtedly contribute substantially to knowledge about psychodynamic theory of personality organization, as well as advance treatment in this area.

There are several suggestions for the direction of future research on eating disorders, depression, and personality organization in relation to the present study. To begin with, a larger sample size needs to be used so that results will have greater generalizability. In addition, the inclusion of subjects who are not weight-preoccupied (normal eaters) would provide a much clearer understanding of the eating disorder continuum and the similarities and differences between specific subgroups. It might also be helpful to include a comparison group of medically hospitalized, normal subjects, or perhaps a group on non-eating disordered, hospitalized depressed patients. The absence of these kinds of comparison groups in the present study necessitated comparisons to such samples from other studies, making results appear weaker and more difficult to interpret overall.
Furthermore, the development and refinement of quantitative methods to more thoroughly and accurately measure psychodynamic constructs such as anaclitic and introjective depression as well as object relatedness would shed much needed light on the current understanding on personality organization in eating disorders. Ultimately it is believed that further work in this area would lead to more successful treatment of eating disorders. Undoubtedly this is a timely and worthwhile goal considering the prevalence, increasing incidence, suffering, and destructive nature of both anorexia and bulimia.
CHAPTER VI

CONCLUSION

This study compared hospitalized anorectics (n = 15), a mixed inpatient and outpatient group of bulimics (n = 15), and weight-preoccupied college students (n = 15) on depression, social adjustment, and personality organization. The results showed a strong relationship between depression and eating pathology, particularly depressive feelings of anaclitic helplessness and dysphoria. Anorectics appeared to have significant social impairment, and weight-preoccupied subjects showed the least social impairment.

All three groups showed intact reality testing, but heightened Barrier scores with a trend for anorectics to receive higher Barrier scores. Anorectics had significantly more self-other boundary problems than weight-preoccupied subjects, which was attributable to higher CONTAM scores for bulimic anorectics. Although hypotheses that eating disordered groups would display more evidence of thought disorder were not supported, post hoc analyses offered some indications that anorectics and bulimics may tend to have more difficulties in this area. Trends were found for overall higher total weighted thought disorder scores for both anorectics and bulimics over weight-preoccupied subjects, and bulimics tended to have more inner-outer boundary problems due to higher CONFAB scores.

Anorectics had the highest Object Representation scores on the Rorschach, followed by bulimics and then weight-preoccupied subjects.
Anorectics received higher Unmotivated action scores, and bulimics received more Active-Reactive, Incongruent, and Malevolent responses. These data suggested that relationships may be experienced for anorectics as meaningless and non-connected, while relationships for bulimics seem to be experienced as more volatile and affectively charged.

The results of this study tend to support psychodynamic theories of a possible relationship between eating pathology and borderline personality organization. While not true for all anorectics and bulimics, many appear to have at least some characteristic borderline weaknesses. These results also provide support for a continuum relationship between eating pathology, depression, social maladjustment, and ego and object representation deficits, with anorectics and bulimics being more impaired, and weight-preoccupied individuals showing some milder but significant problems in these same areas.
REFERENCES


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The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

September 26, 1985

Director's Signature