PERCEPTION OF CONTROL OVER FAMILY AND ENVIRONMENT IN ADOLESCENTS WITH ANOREXIA NERVOSA AND BULIMIA

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PERCEPTION OF CONTROL OVER FAMILY AND ENVIRONMENT IN ADOLESCENTS WITH ANOREXIA NERVOSA AND BULIMIA

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PREFACE

Because of my great concern that anorexia nervosa and bulimia are killing an increasing number of young women, I wished to investigate the area of perception of control with the intention of eventually developing a preventive strategy to lessen the toll these disorders take. This project began with the assistance of Dr. Judith Dobson and thesis adviser Dr. Deborah Kundert who inspired, taught, and helped me in every facet of this project. Committee members, Dr. Alfred Carlozzi and Dr. Brent Snow, offered valuable advice. I also appreciate the cooperation of Ms. Deborah Oistacher of Putnam City North High School, Oklahoma City, who enthusiastically urged her students to cooperate in this project.

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CHAPTER I

INTRODUCTION

Statement of Purpose

Anorexia nervosa and bulimia are eating disorders which primarily affect intelligent, hard-working, obedient, achieving, upper-middle-class, and middle-class young women. Onset of these disorders is usually rapid and precipitated by ordinary events or trivial remarks. Typically, onset occurs between ages 11 and 18.

Anorexia nervosa and bulimia involve both physical and emotional components as do most disorders, but they are somewhat unique because the individuals with the disorders are active participants in the process. Hindu nationalist Mohandus Karamchand Gandhi, American feminist Sonja Johnson, and American entertainer Dick Gregory are three individuals in this century who continue an historical, political tradition of "hunger strike" as a means of influencing the consciousness of

other people. As one researches this area, one wonders for what purpose, if any, would adolescents risk their lives by self-starvation. How does the issue of "control" relate to eating disorders and does it serve a covert purpose as well as the overt purpose of distraction from other issues. Cultural norms and expectations play a role in these disorders (Bruch, 1978; Garner, Garfinkel, Schwartz, & Thompson, 1980). There are factors in the family environment which predispose an adolescent to life-threatening eating disorders (Minuchin, Rosman, Baker, & Liebman, 1978). Furthermore, the starvation process itself has many ramifications in the life of the patient (Bruch, 1962, 1973, 1977, 1978, & 1981). The concept of "control" has been repeatedly implicated in the developing knowledge of anorexia nervosa and bulimia (Bruch, 1978, 1981; Minuchin et al., 1978). The purpose of this research was to determine whether there are significant differences in perception of control between anorexics, bulimics, and control subjects.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In recent years, the popular press has reflected the increasing public awareness of anorexia nervosa and bulimia. The scientific community has increased its investigations into causes of and treatments for the disorders. However many questions still remain unanswered. To gain an understanding of anorexia nervosa and bulimia, this literature review will examine the history, scope of the problem, societal influences, and the nature of these disorders. In reviewing the literature, this paper will use the terms "anorexia, bulimia, bulimarexia" as they were cited in the original works.

Historical Perspective

Prior to 1868.

Prior to 1868, there were only scattered refer-

ences to what we today call anorexia nervosa. The ancient Roman, Seneca, described a custom of his time, Vomunt ut edant, edunt ut vomant ("They vomit in order to eat; they eat in order to vomit.") (Pope & Hudson, 1984). The Roman physician Galen described deliberate vomiting as bulimia following "hunger of an ox" and "hunger of a dog," from the Greek and Latin respectively.

English physician Richard Morton described two cases of his in 1689 which resemble the current definition of anorexia nervosa: "Clinical description included amenorrhea, hyperactivity, and the loss of weight" (Minuchin, Rosman, Baker, & LIebman, 1978). In 1789, French physician J. Nadeau published a description of his patient's death from self-starvation. He attributed his patient's death to the influence of her mother (Macleod, 1982).

1868-1910.

In 1868, William Gull described a disorder called apepsia hysterica whose diagnosis must be made by eliminating all known chest and abdominal disorders. In 1874, he renamed the disorder anorexia nervosa and indicated that it was brought about by psychological

rather than physical factors. He was quite optimistic about a favorable outcome for this disorder (Dally, Gomez, & Isaacs, 1979).

In an 1873 paper, Anorexie Hysterique, ("On Hysterical Anorexia") Lasègue described his work and claimed that all of his patients recovered from this disorder. He also urged that the patient and family be considered as a whole so as not to have a false impression of the disease (Macleod, 1982). Up until this time, although anorexia nervosa was recognized as a psychosomatic entity, practitioners focused almost exclusively on the physical symptoms of threat to life from weight loss. That the patient also suffered from a negative attitude, stubbornness and self-destructiveness was largely ignored (Chediak, 1977). Lasègue's colleague, Charcot, indicated that isolation of the patient was therapeutic and that exclusion of the parents was essential to recovery. In 1883, a Frenchman named Huchard suggested the replacement of Lasègue's term anorexie hysterique by anorexie mentale because the usual hysterical symptoms of blindness, paralysis, and anesthesia are not present in this disorder. The term anorexie mentale is still used in France. In 1895, Gilles de la Tourette separated primary anorexia

(anorexie mentale) from secondary anorexia (anorexie gastrique). Secondary anorexia refers to a voluntary abstention from eating due to spasms of the esophages or stomach (Dally et al., 1979).

Sigmund Freud, in a letter to Wilhelm Fliess dated 1895, speculated that anorexia nervosa might be a form of melancholia (Freud, 1954). Most physicians, prior to 1900, would have diagnosed a bulimic patient as an hysteric if female and as hypocondriac if male (Pope & Hudson, 1984). Pierre Janet, in the early 1900's was critical of those who focused on the patients' excuses for not eating. He differentiated two types of anorexia nervosa: obsessional (retaining hunger but refusing to eat due to fear of being fat) and hysterical (complete anorexia which makes it impossible to eat, sensations of numbness, and unusual tastes in the mouth and throat) (as cited in Dally et al., 1979).

1910-1950.

After 1910, the literature becomes confusing with little consensus, since patients with depression, phobias, compulsions, psychoses, and other symptoms sometimes associated with anorexia nervosa were diagnosed indiscriminately as anorexic. Eager for a more

specific diagnosis, physicians followed Simmonds' 1914 account of his anorexic patient who died and whose autopsy showed that the pituitary was destroyed. Between 1914 and 1940, anorexia nervosa was frequently misdiagnosed as Simmonds' disease or "hyposhyseal cachexia". During this period, an estimated five out of six cases were misdiagnosed and treated as cases of hypopituitarism, sometimes with fatal results (Dally et al., 1979). Finally, the work of Ryle and Sheldon in England, Richardson in America, and Decourt in France during the 1930's and 1940's, along with more sophisticated endocrinological tests, convinced the medical establishment that anorexia nervosa is not synonymous with Simmonds' disease. Ryle stressed that anorexia nervosa was a psychological disorder and that the extensive physical changes were the result of starvation and often did not reverse themselves after weight gain (Dally et al., 1979).

1950-1960.

The interesting case of Ellen West, as described by one of her physicians, Ludwig Binswanger, reflects the lack of concensus concerning anorexia nervosa during this period. West, ill for a long period, had

characteristic symptoms of anorexia nervosa: loss of 30% of body weight, amenorrhea, fasts, fear of fat, and extensive exercise (20 mile daily hikes). She had had 13 years of psychotherapy after multiple suicide attempts and had been diagnosed by various psychiatrists as melancholic (Kraepelin), schizophrenic (Bleuler), severely obsessive neurotic with manic-depressive oscillation (her own analyst), psychopathic, psychotic, fearing impregnation, and anal-erotic. She was discharged from treatment, ate a normal meal, took a walk with her husband, took poison, and died (Binswanger, 1958).

Scope of the Problem

Psychoanalyst T.I. Rubin (1978) wrote:

> Many people do not know how they will feel during the day until they weigh themselves in the morning. They've reached the point where their moods, feelings, and level of self-acceptance are entirely and directly predicated on weight level (p. 29).

Rubin considered this compulsion to monitor weight a seriously destructive mational obsession. Anorexia nervosa and bulimia can occur at any age but typically affect girls from ages 11 through the early 20's.

Squire (1983) reported that the statistically high-risk ages for the onset of anorexia nervosa are at age 14 when challenges of independence from family are threatening and at age 18 when actual physical separation often takes place. Hedblom, Hubbard, and Anderson (1981) kept five year data on patients at The Henry J. Phipps Psychiatric Clinic at The Johns Hopkins Hospital. In all, there were 75 anorexic patients: 35 were at ages 13-20 (52%) and 28 were at ages 21-30 (37.3%). Of the 75, 71 were female and 4 were male; racial background was reported as 73 white and 2 black (no other). These data conform to the data reported in all other reference material.

Consensus is that anorexia nervosa and bulimia usually affect white, middle-class or upper-middle-class females who are typically in their teens or early twenties. They are usually described as achieving, capable, and intelligent. They also report a strong desire to please their parents and others in their lives. This writer's interviews with 20 such anorexics/bulimics supports these demographics. To put the numbers of women affected by these disorders in perspective, Hall (1984) quotes Judith Rodin of Yale University:

> It's been estimated that from 35-60 percent of college women are binge eaters. Psychologists used to think that bulimic women were mentally ill, but nearly all women share their fear of being fat, and most adolescents of normal weight firmly believe that they are fat. You might say that bulimia reflects pathology in society. Bulimic women seem to have carried the typical female reaction to a pathological extreme (p. 43).

Garner and Garfinkel (1979) designed the Eating Attitudes Test (EAT) to determine the anorexic behaviors and attitudes held by thousands of women. After administering the EAT to a college-age sample of women, Garner and Garfinkel concluded that 12% of college-age women have serious difficulties (Worries about food occupy most of their time, and they use drastic weight control techniques including vomiting, laxatives, and diuretics). A score over 30 on the EAT indicates a serious difficulty with food. The original form of the EAT was a 40 item measure of symptoms in anorexia nervosa. The scale was presented on a six point, forced choice, self-report format and was validated using two groups of female anorexia nervosa patients and female control subjects. Concurrent validity with group membership as defined by Feighner's criteria for anorexia nervosa was established on subsequent trials ($\underline{r}=0.87$, $\underline{p}<0.001$). Female obese subjects

and male subjects, as well as recovered anorexic females, scored significantly lower on the EAT than anorexics. Garner, Olmsted, Bohr, and Garfinkel (1982) then proposed an abbreviated version, 26 items, of the EAT. The EAT-26 is highly correlated with the EAT-40 (r=0.98) and factor analysis shows that while bulimic and anorexic subjects do not differ significantly on the total EAT-40 and EAT-26 scores, they differ significantly on the three factor subscales of the EAT-26. This instrument was then used to test college populations to determine the presence of anorexia symptoms. Squire (1983) reports that Ohio State University students given the EAT-40 demonstrated serious eating problems in 16% of sorority women, 23% of dance majors, and 9% of other coeds.

The National Association of Anorexia Nervosa and Associated Disorders (ANAD) reports that anorexia nervosa has reached epidemic proportions and affects over one million people in the United States. Over 90% are female according to their figures, however males are increasingly affected as well.

Although anorexia nervosa is infrequent in males, it is increasing especially among homosexuals and runners. Crisp, Kalucy, Lacey, and Harding (1977)

suggest that males are more resistant to anorexia nervosa and usually develop it only in the presence of massive obesity or serious psychopathology. Diagnosis is more difficult in males due to the lack of the criterion of amenorrhea. It is also masked by the increasingly common public press advising runners to be extremely lean to achieve the speed necessary to excel. Crisp et al. (1977) say that 8% of anorexics are male. Squire (1983) cites the 10% figure and says males share the issues of fear of fat and need to establish control with female anorexics.

Societal Influences

Much has been written in recent years about the pressure society exerts, especially through the press, for women to be thin and attractive. Garner et al. (1980) describe their analysis of 20 years of Playboy centerfold models and Miss Anerica contestants, all of whom are under 30 years of age. Over the 20 year period, the average weight of an American woman under 30 has increased by five or six pounds while the image ideal for those women as represented by Playboy and

Miss America contestants decreased in average weight resulting in thinner size. The authors noted that pageant winners have most often been thinner than the average of contestants.

A related study of diet articles in six popular American magazines during the last 20 years showed that the number of diet articles published increased from 17.1 in 1959 to 29.6 in 1978 (Garner et al., 1980). The pressures on young American women would be hard to deny although the strength of that pressure is difficult to measure. Bruch (1978) speculated that the societal preoccupation with thinness is exerted through parental, peer, and media (especially television) pressures. She cites also the societal demand that women use their talents and abilities in non-traditional ways, as well as the increasing sexual freedom which may prematurely force adult activity on adolescent girls. Bruch indicates that these pressures are both predisposing and precipitating causes of anorexia nervosa and bulimia.

There are also subcultural groups, especially the dance and athletic communities, which foster anorexia nervosa and bulimia through their demand for a thin body. Bulimic purging techniques are taught

between peers in the dance environment while athletes usually control weight through stringent dieting.

Nature of Anorexia Nervosa and Bulimia

Predisposing and precipitating factors.

There is little concensus as to what is actually going on in an eating disorder and therefore, little agreement as to what causes anorexia nervosa and bulimia. UCLA's Dr. Joel Yager states that anorexia contains components of habit, psychology, and biology (Squire, 1983). Kinoy (1984) described all eating disorders as defense mechanisms to protect the sufferer from fears and chaotic feelings. In 1973, Bruch stated that historically, reports of predisposing traits and family background have been contradictory, probably due to differences in diagnostic criteria. Slowchower (1983) prefers to divide the controversy into two viewpoints: the external focus on food-related cues in the environment, and the psychodynamic focus of early internal experiences influencing the eating response to emotional distress, especially anxiety and depression. Levenkron (1982) described the process as follows:

> Dieting triggers the breakdown of defenses that, up to this time, have kept the vulnerable personality functioning. All the symptoms of this regression to infantile traits blossom out of diet-related obsessions and activities the personality feels compelled to play out to protect herself from self-imposed threats. As with all obsessive-compulsive disorders, the obsessive ideas and compulsive rituals increase in number and become more complex until almost all the anorexic's thoughts are involved with serving the disease (p. 4).

Rost, Neuhaus, and Florin (1982) expressed the various traditional psychoanalytic views of causiality as oedipal and preoedipal factors, anorexia as a repudiation of femininity, fear of oral impregnation along with the suppressed desire for it, and guilt and revulsion resulting in vomiting.

A systems approach to this question is described by Minuchin et al. (1979) who see children from a highly enmeshed family pattern, where loyalty and protection are stressed and autonomy is discouraged, trying to emulate the parental vigilance through self-vigilance. These children become self-conscious and constantly alert to parental signals. When adolescence occurs, they have a desire to be with peers, but they cannot see themselves as separate from their parents. Minuchin et al. (1979) see an ensuing struggle as the children attempt to "help" or

"change" their parents to conform with their newly emerging view of the world. The parents and children become more overinvolved with each other through this struggle. In these families, there also tends to be an emphasis on bodily functions, especially eating. The family thus feels comfortable focusing on symptoms of anorexia and bulimia. Illness becomes the "identity card" of the patients. As their dependent demands increase, the family increases protective control.

Boskind-White and White described bulimarexia as a "learned behavior" which can therefore be "unlearned." They viewed it as "maladaptive response patterns that stemmed from the process of female socialization" (1983, p. 20). Pope and Hudson (1984) cite the fact that 50% of anorexics also have bulimia as evidence that causes are mixed. They indicate that a hypothalamic dysfunction is implicated in the cause and note that pituitary insufficiency causes loss of appetite. They also report that some researchers speculate that bulimia is a type of seizure disorder similar to epilepsy.

A more cognitive explanation was given by Bruch (1977). She stated that one needs to develop the adaptive processes of <u>assimilation</u> and <u>accommodation</u>.

Potentially anorexic children function almost exclusively in the accommodating mode while assimilating very little. This leaves the children in Piaget's "period of egocentricity." Then they are left behind their peers in the ability to evaluate. Very few of the parents are aware of their children's literal-mindedness, and most parents are proud of having such obedient children. These youngsters skip the stage of resistance and remain convinced that adults know better in all instances. This overcompliant pattern also is expressed in the few friendships these children have. One typical client of Bruch's said that she felt she was a "blank" on which her friend could project whatever she wanted. It did not occur to her to develop individuality (Bruch, 1977).

Dally, Gomez, and Isaacs (1979) stated that anorexia nervosa stems from attempts to assert oneself and break free of parents or a parental spouse. They view the meal-time struggle for control as a reflection of the more serious power struggle in which parents attempt to keep the child young forever while the child struggles to grow up. Another type of struggle is the adolescent's attempt to reach the cultural ideal of thinness as represented in the media.

Garner et al. (1980) state that this pressure is definitely implicated in causing anorexia nervosa and bulimia.

Aponte and Hoffman (1979) described precipitating events as quite ordinary in nature. Some adolescents were a few pounds overweight and started to diet. They felt very powerful when they lost weight and received compliments, so they continued the behavior. Some suddenly saw themselves in a photo or mirror in a "new way" as fat. Some went away from home to camp or college or changed schools; then, they became anorexic. For some, biological development at puberty started the anorexic behavior. For others, a small criticism triggered the process.

Pyle, Mitchell, and Eckert (1981) have related events to the onset of bulimia: voluntary dieting (30/34 cases), traumatic event (30/34 cases), loss or separation (23/34), leaving home (7/34), moving, rejection by boyfriend (4 cases each), pressures from parents, and various other life events. At the University of Illinois, Whyte and Kaczkowski (1983) polled pshchiatrists and psychologists to ask in what percentage of cases of anorexia nervosa were the following precipitating events: Onset of puberty, 90.1%;

dieting because of obesity, 87.4%, self-consciousness about physical appearance, 95%; illness of a family member, 58.4%; change of residence, 57.3%; separation from parent or sibling, 74.6%; exposure to advertisements for slimming aids, 38.2%; change of employment or school, 63.4%; feelings of powerlessness or loneliness, 83.3%; and death of a close friend or relative, 62.1%.

Symptoms.

Vivian Meehan, President of ANAD, identifies eating disorders as a continuum of behaviors, attitudes, and symptoms relating to a preoccupation with food. Each individual has a cluster of symptoms and can be anywhere from 30% underweight to morbidly obese (Barrile, 1983). Squire (1983) also illustrates the eating arc as a continuum, one on which the patient will move as time goes by. Squire (1983) describes the cyclical nature of the denial/desire seesaw which often becomes "the central, life preoccupation" (p. 12). This seesaw can also be thought of as the "either/or syndrome" (Either I am perfect or the worst failure. Either I am fat, or I am thin.)

Some symptoms of anorexia nervosa (clusters of which any one individual might have) are phobias

concerning appearance, obsessional thinking about food intake, obsessive-compulsive rituals, inferiority feelings, denial of body image, depression, anxiety, paranoid thinking, polarized thinking, disinterest in sexuality, passive-aggressive behavior, and delusional thinking. Clinical symptoms used for diagnosis include a loss of 20% of body weight, loss of menstrual periods, low potassium levels, thinning hair, dry skin, lanugo (downy body hair), constipation, low blood pressure, low body temperature, low pulse rate, reversion to a pre-adolescent appearance, and denial of starvation (Arenson, 1984; Chediak, 1977; Levenkron, 1982).

Anorexics have many traits in common. Squire (1983) indicated that the strength of these traits relates directly to the degree of illness in the individual patient. There is a drive to be perfect coupled with a fear of failure, a desire to be thin for reasons other than health, and great difficulty in identifying and expressing feelings, particularly anger. There is the tendency to be overly compliant with the wishes of others coupled with low self-esteem. There is a gross distortion of body image. And there is the feeling that one is both very special and

inferior at the same time. Landau (1983) mentions a strong desire to please parents, obedience, high achievement in school coupled with the feeling of imminent failure. There is also a feeling of no control over the environment and an overwhelming sense of ineffectiveness (Minuchin et al., 1978). The Johns Hopkins University Hospital program uses three criteria for diagnosis: self-induced starvation (behavioral symptom), fear of fatness (psychological symptom), and amenorrhea (physiological symptom). Other signs or symptoms then either support or rule out the diagnosis (Hedbloom et al., 1981).

Vincent and Kaczkowski (1984) polled bariatricians, psychiatrists, and clinical psychologists for their views on several facets of bulimia. Approximately 75% of the respondents rejected the definition of bulimia found in the DSM-III, but accepted many of the diagnostic criteria. They concluded that bulimia has not been clearly conceptualized as a specific eating disorder. One reason for this is that under the DSM-III definition, those who are bingers, but not purgers, and those who are cathetic, diuretic abusers, and vomiters but do not gorge are included but not differentiated. If one wishes to differentiate be-

tween those behaviors which appear to be overcorrection to the starvation behavior of anorexia nervosa, we might consider the following: (a) bulimia proper, when the person is of normal weight and binges, fasts, and purges to control weight or in response to anxiety; (b) bulimic obesity, when one overeats consistently and is overweight but does not purge; and (c) bulimic resolution to anorexia nervosa which occurs following weight gain in an anorexic. Vincent and Kaczkowski (1984) therefore suggest that at least five of the following symptoms of bulimia should occur for a diagnosis of bulimia: recurrent binge eating, guilt after the binges, self-induced vomiting, diuretic use, fear of not being able to stop eating, depression or mood lability, significant weight fluctuations, body image distortions, impulsiveness, and female sex. Squire (1983) quotes Dr. Katherine Dixon on the components of "bulimic thinking":

> There is denial of bodily damage, a belief in personal weakness in the face of food, a displacement of feelings on food, a presence of excuses for eating behaviors, and repentance about eating behavior coupled with good intentions for the future (pp. 202-203).

In 1973, Bruch described the physical complications which result from the vomiting and purging

behavior of the bulimic. She states that hypokalemia is common and serum sodium levels may be reduced with accompanying hypocholremia and alkalosis. This will be more likely to happen when there are multiple sources of potassium loss. Potassium loss puts the patient at risk for heart malfunctioning. There is also risk of kidney failure.

The actual binging behavior itself has been described by Pyle, Mitchell, and Eckert (1981). First there is a period of uncontrolled ingestion of food in episodes which can be routine or unpredictable. At times, binges appear to be precipitated by stress. The episode lasts from minutes to hours and usually takes place in private. Food ingested at such times is most often sweet, soft in texture, starchy, and has a high calorie count. It usually requires little chewing. Plenty of liquids are consumed along with the food to aid in vomiting later. The binging episode ends only due to significant abdominal pain, interruption by another person, induced vomiting, or sleep. Pyle et al. (1981) indicate that bulimia can exist without a previous episode of anorexia. This author's interviews with bulimics also support this view.

The main differences between anorexics and bulimics have to do with the effects of the actual starvation itself. When anorexics starve themselves, biochemical changes occur in their bodies which cause physiological abnormalities that combine with psychological deficits. Bulimics, on the other hand, eat more nourishing food and often turn toward food in times of stress (Boskind-White & White, 1983). Bruch (1981) states that anorexia nervosa and bulimia have many features in common, particularly the use of food to solve problems of living. Pope and Hudson (1984) describe severe bulimia as the "most profoundly ego-dystonic disorder that we have witnissed in all psychiatry" (p. 20).

Perfectionism appears to be a feature of anorexia more than bulimia. This struggle for perfection reflects a lack of self-esteem and a belief that worth is determined not by what one is, but by what one does. The polarity which was discussed previously may cause the anorexic to set impossible standards for achievement, so that an outstanding performance will appear to be worthless when it falls short of perfection. The continual self-criticism protects patients from the judgments of others since their own

standards are far higher than their most severe critic. They surpass all criticism with something far more negative, and therefore remain in control of the situation. They can then establish the distance they want between other people and themselves. Criticism or praise from others has little meaning for them. Perhaps as a result of the starvation itself, combined with the drive to be the perfect dieter, the distortion of reality begins to take hold (Rumney, 1983).

Another feature of the anorexics' behavior is the apparent regression to a child-like stance wherein adult responsibilities are for other people. They also return to the preadolescent body as they stop menstruating and regain children's sexually immature bodies. The obvious oral nature of the sphere of conflict can be looked on both literally and figuratively. The dependency on parents is also a feature of these disorders, and parents use their child's behavior to justify the parental vigilance which had been there all along (Arenson, 1984; Becker, Körner, & Stöffler, 1981; Crisp, 1965; McKellar, 1983).

Bruch (1962) discussed the paralyzing sense of ineffectiveness which pervades anorexics' thinking. They feel powerless and are reactors only. They deny

feelings and do not wish to be vulnerable to others through sharing them. Casper, Offer, and Ostrov (1981) studied 30 female adolescents who had been diagnosed as having acute anorexia nervosa. These patients differed significantly from normal adolescents in mood, self-esteem, social relationships, and in attitudes toward sex. Those anorexics with a late onset of the disorder (age 16 or later) also showed maladjustment in impulse control, self-perception, and body image. Patients were found to be well adjusted with regard to moral values, family relationships, and educational goals. The younger onset group's prognosis is more favorable than the older, perhaps because they have fewer disturbances with which to deal (Casper, Offer, & Ostrov, 1981).

Anorexic patients have an almost total lack of sexual desire and this is most often attributed to the starvation itself. Comprehensive psychosexual histories of anorexics show that they have a wide spectrum of sexual knowledge, attitudes, and behavior. Age at interview seemed to be a major factor determining actual sexual experience (Beaumont, Abraham, & Simson, 1981; Dally, Gomez, & Isaacs, 1979; Pope & Hudson, 1984).

Hyperactivity is another major phenomenon associated with this disorder. There is a lack of awareness of fatigue even when the patient is in advanced stages of starvation. Bruch (1962) hypothesized that this paradoxical sense of wellbeing is an expression of conceptual and perceptual disturbances. This is in contrast to patients who are noneaters due to hysteria who are very much aware of their physical weakness. The overactivity is rarely mentioned by the patient, but can be observed in its usual form of long walks and exercising in private.

The physical effects of starvation influence the height of the patients in adulthood. Bruch (1962) stated that all of her male and female patients were measured by roentgenographic assessment of bone age and were found to be markedly retarded in height and physical maturation. Females were not distressed by their short stature, but all three male patients were concerned by their height which would not exceed five feet, two inches. Only one female was tall, five feet, nine inches, but she had been obese up to age 20.

A meaningful psychiatric evaluation is not possible until the patient is eating normally. The longer the period of time encompassed by the starvation, the more

likely the psychic effects have been integrated into the personality. Bruch (1978) described this state as one resembling borderline schizophrenia. Aponte and Hoffman (1973) pointed out that this state renders the patients unable to talk about what they feel, because they are in an almost toxic state. Jeanmet (1984) describes the "anorexic stance" in which <u>every-thing</u> constitutes a challenge. Everything is aimed at others and is provocative, including self-starvation, refusal to eat in the company of others, secret food rituals, lavish attention on feeding others, and self-destructive behavior. Aponte and Hoffman (1973) write that anorexic girls are not self-directed and do not feel entitled to lead a life of their own. Many of them experience themselves and their bodies as separate entities. They then view the task of the mind as controlling the body. Some speak of feeling divided.

The physical symptoms, as described in the literature, are just that, "symptoms." What then is <u>really</u> going on with anorexics and bulimics. Adrienne (an anorexic/bulimic) said, "It is very important to look like this. It makes people look at me. It makes me special. I don't want to lose that" (Levenkron,

1982, p. 101). Aponte and Hoffman (1973) describe the difference between anorexia and "normal dieting": The difference lies in the difficulty of the task (not eating at all). Then the physical and psychological effects of starvation interact, and life changes dramatically. This writer is reminded somewhat of the process of drug addiction in the sense that the initial experiences change one's view of self and others in a dramatic way. Then one is not the same person anymore. In this case, it is not "the drugs talking" but the "starvation and insecurity talking." University of Toronto researchers Garner and Garfinkel (1979) describe the process of dieting which was begun to enhance self-esteem and to be more involved with others, but which leads to withdrawal and isolation. Then, a downward spiral of fear of loss of control combines with an obsessive involvement with food.

Associated disorders.

There is some difficulty in differentiating the precursers of anorexia nervosa and bulimia from the actual symptoms of the disorders themselves. Moreover, there are some factors which are associated with these disorders as well as those which appear to result

from them. Bruch (1973) stated: "The present tendency is to consider all functional symptoms of anorexia nervosa as secondary to the starvation" (p. 38).

Impulse control is often cited as associated with bulimia. Casper, Offer, and Ostrov (1981) reported that 40% of a group of late adolescent bulimics experience gorging/vomiting episodes as a loss of control. Pyle, Mitchell, and Eckert (1981) cite stealing behavior and chemical abuse as indicating problems with impulse control. Most commonly, when stealing is reported in conjunction with bulimia, the items stolen are laxatives and food. Even when the bulimic has money, the embarrassment of buying many packages of laxatives each day often leads to theft. Several bulimics of this author's acquaintance have been diagnosed as kleptomaniacs. Squire (1983) reports stealing in conjunction with the bulimic phase of anorexia. She finds that the stealing may stop when the patient is at low body weight. It is almost as if the control is complete when in an anorexic phase, and control is lost when in the binge/purge cycle.

Depression is often reported in conjunction with anorexia and bulimia (Hendren, 1983). Rumney (1983) hypothesizes that depression is the means by which

anorexics stay out of touch with their feelings, especially anger. They use it to numb themselves. Pope and Hudson (1984) found that 47 of their first 136 subjects with bulimia were depressed and had made at least one major suicide attempt during their lifetimes.

Dally, Gomez, and Isaacs (1979) reported that obsessionality accompanied anorexia nervosa of early onset in 59% of their patients. The incidence declined with increasing age at onset. They questioned whether the obsessionality (and a corresponding introversion) was present in the premorbid personality. They state that the obsessionality is a feature of the anorexia and disappears after recovery.

Symptoms associated directly with the starvation in anorexia are hyperacuity of the senses, inability to concentrate, bizarre thinking, hyperactivity, disturbed sense of time, a feeling of being special and unique, inability to communicate, distorted body image, and obsession with food, cooking, cookbooks, and rituals (Aponte & Hoffman, 1973). Crisp (1970) reports a tendency for patients to have an EEG "diencephalic" spike and wave activity (brain wave). This wave may be a result of predisposing factors or

may reflect a nutritional factor. In patients who binge and purge with vomiting, the electrolyte status is seriously deranged and epilepsy-like seizures sometimes result.

Disorders found to be associated with bulimia in a study by Pope and Hudson (1984) were anorexia nervosa (34%), major depression (66%), bipolar disorder (14%), alcohol abuse (27%), panic disorder (41%), agoraphobia (15%), obsessive-compulsive disorder (31%), kleptomania (31%), other forms of drug abuse (14%), personality disorders of all types (15%), and scizophrenia (none) (p. 48). In addition, erosion of the teeth is commonly reported in chronic vomiters. Hypoglycemia, metabolic disorders, complications from psychotrophic drugs, neurological abnormalities, infected salivary glands, hiatal hernias, esophagial bleeding, reverse paristalsis, hypokalemia, kidney problems, electrolyte imbalance, secondary ammenorrhea, dehydration, and cardiac arrythmias are also commonly reported in conjunction with the binge/purge cycle (Boskind-White & White, 1983).

Family involvement.

It is important to keep in mind that by the time

patients with anorexia nervosa and bulimia come to treatment, they have already suffered immeasurable distress from the ravages of the disorders. Likewise, their families have also been upset by the disorders, distressed by worry over the family member who is ill, and defensive about the family's lack of ability to "cure" the patient. A certain amount of anger at the patient is also usual. Anxiety and depression are understandable accompaniment to a situation where a child refuses to eat meals with the family. It is difficult to assess such families, and to do so is not to assume causiality.

It has been observed that such families often emphasize polite behavior and nonexpression of negative feelings until the illness is manifest. Then, the negative may be expressed: by the patient as constant negativism and by the parents as complaints that nothing was wrong until the patient spoiled it all by refusing to eat (Aponte & Hoffman, 1979); Bruch, 1962; Minuchin et al., 1978). It would be typical for the patient to have been the child who tried to guess what the parents wanted and to act accordingly (Aponte & Hoffman, 1973). In some cases, the family members have been in such pain they wished the child dead (Conrad, 1977).

There is no doubt that the patients, in many cases, have been loved and appreciated by their families. However, they are sometimes not seen as individuals in their own rights, but as people who would make their parents' lives more satisfying and complete (Aponte & Hoffman, 1973). When patients are seen for individual therapy, they may appear helpless and dependent, whereas in a family setting, they may appear to dominate family life (Yager, 1982).

Bruch (1977) cites a "paucity of sons" in families of patients. More than two thirds of the families had daughters only. Anorexic girls who had brothers were often the youngest child or were much older than their brothers. The age of the parents may also be significant. The parents of Bruch's (1977) last 50 patients were considerably older than average when the girls were born. She finds this significant because it indicates that family patterns and life-style may be set. In that case, it would be usual to demand a great deal from the children in order to live up to family expectations. Wilson (1983) reports that some parents are hypermoral and refuse treatment for their children because they see the child as "morally weak."

Bruch (1981) reports that unlike the families of obese patients where family tensions and difficulties are apparent, families of anorexics appear stable and peaceful. Each parent in such a family is convinced that his or her parental skills are outstanding. Minuchin et al. (1978) describe what they call the anorexogenic family. This type family is one in which protection from the outside world takes precedence over autonomy. Family members are enmeshed, over-involved with each other, almost a part of each other. When the child in such a family is doing something, the goal is not competence, but approval. The parents in enmeshed families were compared with the parents in nonenmeshed families to determine what happened with stress applied to the family system (Minuchin et al., 1978). The parents of nonanorexics conflicted openly in an intense, confrontive style. The parents of anorexics were evasive in the face of conflict. They used comedy, crying, rationalization, denial, and complaints. Yager (1982) did an analysis of how anorexic and bulimic patients viewed their parents, and it was determined that each person experienced and reported a very different perception of the family. Squire

(1983) reports some basic differences between anorexic and bulimic patients' families: Families of anorexics were less emotional; conflicts were hidden; roles were defined; and patients had less alienation from parents. Families of bulimics were highly emotional and reactive; conflict was unresolved and tumult prevailed; patients experienced great tension and alienation from parents.

Dally, Gomez, and Isaacs (1979) make an excellent point that just as the numbers of divorces and separations give no idea of the incidence of marital disharmony, so the number of parents who have had psychiatric treatment does not indicate the true rate of psychiatric health. Having said that, however, it is useful to review the findings of several researchers on this question of parental psychological health. Dally, Gomez, and Isaacs (1979) reported that in their 11-14-year-old patients, 75% of their mothers were clearly depressed when first seen and had been for at least six months before signs of anorexia nervosa began. This compares with 30% of mothers of the 15-18-year-old group and 20% of the 19-year-old and older group. The depressed parents in these cases are likely to withdraw from their children.

Dally et al. (1979) implied that it was this parental withdrawal which may have contributed to the development of anorexia nervosa. Yager (1982) reported that when comparing families of restrictor and bulimic patients, he found affective disorders in 14% and 41% respectively. Psychiatric disorders in general were in the families in 18% and 50% of cases. Pyle et al. (1981) also suggested the ralationship of a family history of depression and anorexia nervosa. They suggest that antidepressant therapy might be an area to research to validate this hypothetical link. Hudson, Pope, Jonas, and Jurgelun-Todd (1983) also found evidence that anorexia nervosa and bulimia are closely related to affective disorders.

Stern, Whitaker, Hageman, Anderson, and Bargman (1981) have tested their hypothesis that all members of the anorexics' families are developmentally arrested in the area of separation-individuation. They have observed that the parents have themselves experienced deficits in early parenting. The over-controlling insensivity of parent to child seems to continue down through the generations. They found that the <u>degree</u> of disturbance in anorexics' families will fall on a continuum of developmental deficit

in the capacity for separation-individuation.

There are some anorexics and bulimics who are married. Crisp, Kalucy, Lacey, and Harding (1977) hypothesize that a man who marries a woman who is known to be anorexic or bulimic, is neurotic. If the patient recovers under this circumstance, and she usually does not, the marriage may break down because of the radically different life-style of the patient. Crisp et al. (1977) note that severely ill bulimic types may become sexually active and conceive without prior menses during periods of slight weight gain. Such pregnancies are usually followed by severe relapse.

Family interaction.

It appears that there is a typical pattern of interaction in the families of those with anorexia nervosa and bulimia. Selvini-Palozzoli (1978) suggested that it is inappropriate to study isolated phenomena without studying the broad natural context in which the phenomena occur. Bruch (1973) noted a paralyzing sense of ineffectiveness in interpersonal relationships. Why would an adolescent rather starve than continue a life of accommodation. Rosman et al.

(1977) describe four characteristics of the families' behavior which they observed during family therapy sessions: enmeshment, overprotectiveness, rigidity, and lack of conflict resolution. Any one of these characteristics is not a significant predictor of an anorexogenic family, but the cluster of these characteristics produces serious problems. If one takes this concept one step further, one sees that the family system which produces the anorexic/bulimic symptoms needs for the adolescent to remain ill in order to regulate and maintain this family pattern of interaction. If we view this concept as a cause/effect or linear model, the family would appear to cause anorexia with the child as the victim who is helpless due to family causiality. However, when we view the family as a system, we see that just as the family combines with stress from outside that family to affect the child, so that same child goes on to affect the family. Therefore, the current context of the disorders is all one has with which to work. It is also characteristic of this family system to resist change because it perceives itself as highly vulnerable. There is an intensity to such family interactions, almost an "us" (the family)

versus "them" (all others) quality about them.

The three most common patterns of conflict-avoidance in such families are the (a) triangulation of the child in relation to parents so overt and covert conflicts go through the child; (b) parent-child coalition formation and detouring around issues or certain family members; (c) conflict remaining covert through protecting or blaming the sick child (Minuchin et al., 1978). Aponte and Hoffman (1973) also cite the development of anorexia nervosa as being closely related to "abnormal patterns of family interaction" (p. 106). Selvini-Palazzoli (1978) has studied families as cybernetic (self-regulating) systems. She analyzed transactional patterns of communication between family members and found that families of anorexic adolescents tend to be (a) closely related, (b) hard-working, (c) peaceful, (d) conventional in behavior, and (e) overly concerned for the welfare of their children. She also found that such families have many unspoken family rules, the most fundamental of which is that family rules may not be questioned. Selvini-Palazzoli (1978) also reports that family members blame or credit all decisions, not to personal preference but to other family members'

needs. Thus, all decisions are for the "good" of someone in the family. Such parents also commonly blame themselves for being too loving, too devoted, too caring.

Hedblom et al. (1981) indicate that whether or not family dysfunction is reactive to or precedes the illness has not been resolved. They found that among their patients, 75% were excessively dependent on their parents and could not discuss their thoughts and feelings with them. Patients interpreted family values as personal demands. Furthermore, they perceived themselves as having no control over their environment. About 25% of the parents of these patients depended on their children to meet their psychosocial needs and therefore did not aid their children in separating from them. Approximately 18% of the patients' parents had such serious mental illness or drinking problems that they could offer no support to the patient. About eight percent of parents were afraid of new behavior as their children recovered and attempted to maintain their protective roles. About 8% of these parents directly blamed a specific individual for the patients' problems. The blaming behavior precluded any support for change

either in the patient or in the parents. About 50% of the parents in this sample did not reflect a specific problem interaction.

Bruch (1973) reported that in anorexia nervosa, "The main issue is a struggle for control, for a sense of identity, competence, and effectiveness" (p. 251). The parents have an intense need to be in control. This need is only implied while the child is obedient and over-conforming, but when the child refuses to eat, parental demands become overt. In family therapy sessions, parents appear totally unaware and unconcerned about the emotional needs of the patient. They continue to assert that their ideal, happy life is marred only by the patient's refusal to eat (Bruch, 1973).

For children to develop normally, they need two forms of behavior: that initiated within the individual and that in response to external stimuli (Bruch, 1973). It is in the area of self-initiated cues that anorexics are deficient. In anorexics' families, the children's growth and development are viewed as the parents' accomplishments. The patients do not develop skills for living autonomously. Bruch (1977) has found that the outstanding achievements of anorexics

are the result of extensive effort on their parts, and in fact, prefers to call them over-achievers. Because the parents take responsibility for the children's needs (Children eat when mother is hungry, and sleep when mother is tired.) these children fail to learn to differentiate between being hungry and other discomfort (Bruch, 1977). The parents in such families also distort and mislabel feelings, sensations, and moods in their children's early lives. The children are therefore, out of touch with their own bodies and emotions (Bruch, 1981).

Dally et al. (1979) reported several related phenomena. The patient with anorexia nervosa has a complex influence at home. The eating behavior itself is manipulative, and it is difficult to separate those who struggle for control in an effort to gain identity and effectiveness from those who are not ill but are simply manipulative. In some cases, the struggle for control will manifest itself as a struggle for the kitchen itself. The patient becomes dictatorial about the food, cooking, and cleaning-up. This battle is rarely resolved until either mother or daughter is banished from the kitchen. In cases where the mother retained her territorial rights, the

patient must perform all cooking and eating rituals at night (Dally et al., 1979).

Wilson (1983) views the families of anorexics in a slightly different way from the authors so far cited. He sees the parents as highly motivated, well-meaning people who will do anything for their sick child. He supports the parental rules, limits, and desire to teach children impulse control. It is only that these parents are overly conscientious in their parenting which results in the child's being over-controlled. Wilson (1983) asserts that the anorexic child is confronted by a united moral front of the parents and cannot play one parent off the other. Therefore, he is suspicious of the dramatic end to symptoms reported by Minuchin et al. (1978) because Wilson believes they simply disrupt the united parental controlling position and authority. Wilson (1983) views this disruption as undesireable and temporary.

When only perfect control is viewed as "good enough," then one views oneself as being out of control most of the time. It appears essential in the development of anorexia nervosa to strive for "perceptual absolute control" of body, parents, self, and others. The goal of life becomes perfection and absolute

control. Some patients believe that if one can control hunger, one can control all other human needs (Chediak, 1977). Food becomes the battleground, the symbol of self-control. Negativism in the patient may mask feelings of ineffectiveness (Conrad, 1977).

Yager (1982) states that the symptoms of anorexia nervosa and bulimia protect one or both parents and the parents' marriage, much in the same way that a school phobia can protect the family system. The anorexic may be acting out of guilt for real or imagined wrong-doings. Such a family may also include powerful coalitions between parent and child or between a parent and a person outside the nuclear family. Yager (1982) also supports the belief that family interactions evoke and sustain the child's symptoms. Rumney (1983) sees the control issue as a reflection of the powerless position of the child in relation to the parents. Anorexics lack a self-identity and do not differentiate themselves from their parents. They may not admire their parents and are therefore in conflict. They resolve the conflict by remaining a child, both physically and emotionally.

There is a phenomonon in family communications wherein family members speak for one another and

simultaneously disqualify what the others say. Anorexics' families rarely speak directly of ideas or feelings (Aponte & Hoffman, 1973). Often emotions are expressed indirectly as well. Anorexics are sometimes described as the sensitive and emotional ones in the family: They express what other people feel (Aponte & Hoffman, 1973).

Treatment methods.

The goals of treatment become obvious after having studied the nature of anorexia nervosa and bulimia. It is first essential to prevent death by instituting nutritional support. Then, when the body chemistry is corrected, other therapy can be utilized. It is necessary to instill in the patients a sense of control over their bodies, their lives, and their environments. Patients must be enabled to grow up both physiologically and emotionally. Bruch (1981) reported that about one third of anorexics will make progress toward recovery, one third will remain the same, and one third will become more ill. A favorable prognosis correlates with a cluster of factors which inclued: early onset of symptoms, premorbid weight in normal range, unmarried status, short duration

of illness, minimal distortion in body image, high social class, no mental illnesses in immediate family, lesser degree of purging behaviors, high motivation for treatment, and female sex (Bruch, 1981; Crisp et al., 1977).

Some researchers report success with treatment of anorexia and bulimia by drug therapy. Pope and Hudson (1984) have used antidepressant medication in a double-blind study and found it effective in significantly decreasing bulimic episodes. Dally et al. (1979) report the use of hypnotic drugs in some patients and sedating tricyclic antidepressants in others to induce relaxation since malnourishment has been associated with restless sleep. They do not cite the success rates for this treatment however. Dally et al. (1979) have also tried chlorpromazine, electroconvulsive therapy, and brain surgery in extrerely serious cases of anorexia and bulimia but found them too risky due to extreme side effects. Pope and Hudson (1984) report some success with anti-convulsant drugs, such as Dilantin, which may correct a specific electroencephologram abnormality which corresponds to a loss of impulse control.

In cases where patients live with their families,

structured family therapy has proven very effective for recovery of anorexics and bulimics (Minuchin et al., 1978; Rosman et al., 1977). Because the therapist becomes an active participant in the family interaction, a new pattern of communication is instituted in a relatively short period of time. The family therapy lunch, used by Minuchin at the Philadelphia Child Guidance Clinic to initiate the family into therapy, allows the therapist to witness current methods of interaction in the family (Rosman et al., 1977). During the early stages of treatment, family therapy has as its goal symptom removal through using the resources of the family. The feeling of accomplishment in family members then facilitates further therapy. Issues dealt with later in therapy are marital problems of the parents, parenting problems, and individual problems of the family members. Sessions may be individual or conjoint at this atage, but all changes are viewed with constant awareness that they will impact on the family system (Rosman et al., 1977). Enmeshment is "claimed with pride" by anorexics' families since they see themselves as being loyal, protective, responsible, and responsive (Minuchin et al., 1978). Individual autonomy is

encouraged by disallowing any speaking for other people and apotlighting all competent acts and fostering them. The relabeling of the problem as a family problem rather than the child's eating problem can foster change (Minuchin et al., 1978).

Barcai (1971) reports two problems with family therapy approach to anorexia nervosa and bulimia: It may be too threatening to the family who might discontinue treatment, and a crisis may be precipitated as a result of the confrontation. The advantages of family therapy for these disorders are: (a) The patient can receive immediate help from the lifethreatening disorders. (b) Immediate autonomy is established for both the patient and the parents. (c) It gives immediate results which encourages the family to undergo further therapy (Barcai, 1971).

In-hospital treatment frequently results when the patients' lives are at risk. Medical evaluation occurs and therapy begins. Many times, hospitalization serves an additional purpose of separating the patients from their families. While in hospital, behavioral therapy is most often used where privileges such as getting out of bed, watching television, making and receiving phone calls, or having visitors

are all made contingent on either eating or gaining weight. It has been found more effective to use weight gain as the criterion to lessen struggles about what and how much is eaten (Rosman et al., 1977).

Rosman et al., 1977 report that with an anorexic and bulimic patient sample of 50 cases, recovery based on physical criteria was 86% recovered, 8% fair, and 6% unimproved. The clinical assessment (psychological) of the same patients was evaluated at 88% recovered, 6% fair, and 6% unimproved.

Bruch (1962) used individual psychotherapy with anorexics and has had considerable success since she realized that giving insight is useless in these cases because it reinforced the patients' inability to know what they themselves felt. When she became less interpretive and more fact-finding, the patients changed their responses. Because for many, it was the first time someone listened to what they had to say and did not tell them how to feel (Bruch, 1962). Levenkron (1982) advocates a nurturant-authoritative psychotherapy to help the patient accept emotional support since these patients are used to being the nurturers.

Some therapists suspect that unresolved grief

may be implicated in anorexia nervosa, and their studies have suggested ritual mourning to resolve the grief (Feinstein, 1981; Selvini-Palazolli, 1978; Wood & Landhurst, 1980). This mourning seems especially helpful in cases where a relative died by violence or suicide, and in cases of abortion or miscarriage.

There are several methods of self-help available for anorexics and bulimics. Self-hypnosis, meditation, relaxation therapy, and hypnosis are aids in normalizing eating by reducing stress (Squire, 1983). Anorexia Nervosa and Associated Disorders (ANAD) is a national organization with representatives from all areas of the United States. This organization runs physician-led groups and can be reached by mail: ANAD, Box 271, Highland Park, Illinois 60035. All across the country are units of the Bulimia Anorexia Self Help (BASH, Inc.) which has monthly group meetings which are open to the public. BASH organizations are most often affiliated with Anorexia/ Bulimia Hospital Units such as the one at Mercy Health Center, Oklahoma City, Oklahoma.

Two case Studies.

Because of a wish to protect the privacy of non-public people, the two typical stories which represent the most common elements of the anorexia nervosa and bulimia disorders will be from published books of public figures. The first case spans a 20-year period in the life of actress Jane Fonda (Fonda, 1981). Her childhood was one of some turmoil since her father was a well-known actor and her mother was a socialite. Her parents divorced during her childhood, just prior to her development of anorexia/bulimia. Jane's mother was a noted beauty who frequently said that if she ever became overweight, she would kill herself. In fact, she did take her own life when she reached her fortieth birthday. Jane was not informed of the cause of death; she was away at boarding school at the time. She read of the suicide in the newspaper some time later.

It was while she was living at school (age 14), that Fonda and her friends became preoccupied with food. Eating binges were very common at the school. Fonda speculates that eating was a way to relieve boredom and sexual tensions. The girly were very weight conscious and at one time, they sent away for

diet chewing gum which they assumed derived its effectiveness from tapeworms' eggs. Their goal was to continue to binge eat and not gain weight. Later, after studying Roman civilization, Fonda began to imitate the retreat to the vomitorium following food binges. It was common practice at the school for girls to induce vomiting after over-eating. She said that it gave her a heady feeling of being in control when she induced vomiting. The young Fonda had no idea that she would become psychologically and physically addicted to the indulgence/deprivation cycle. The more she forced herself to vomit up her food, the more she needed to eat to satisfy her body's nutritional needs. The rapid drop in blood sugar caused by the vomiting makes one ravenous. She describes this bulimarexia cycle as leaving her weak and depressed. While in college, the bulimarexic cycle continued and another abuse was imposed on her young body, dexedrine. Originally, students used this drug to keep awake while studying. However, once they found out that amphetamines took away appetite for food, Fonda and her friends went to their physicians and got prescriptions. No doctor ever mentioned possible drug addiction to her.

As she escalated to using more and more to get the same effect, she felt as if she did not have any control over her life. She did, however stop taking this drug and suffered withdrawal symptoms of fatigue and depression.

In her early modeling years after college, Fonda began to abuse diuretics. She increased the dosage as tolerance to the drug developed. The potassium loss from vomiting and diuretic abuse caused severe muscle weakness, fatigue, and kidney problems. The diuretic abuse went on for 20 years. Of course, now that Fonda is associated with physical fitness and natural methods of health care, she realizes the damage she did her body through ignorance and the desire to conform to the standard of beauty. Fonda regrets most of all that during the years when her daughter Vanessa was growing up, she was too involved in the compulsive rituals of bulimarexia to give her daughter the attention and care she needed. Fonda sums up those 20 years of over-involvement with food as follows:

> If I had only known what I was doing to myself! If I had only understood twenty years ago the futility, the alienation, the self-denegration of trying to fit oneself into a mold. It was as if I was thinking

> of myself as a product rather than a person. I had yet to learn that the most incredible beauty and the most satisfying way of life come from affirming your own uniqueness, making the most of what you really are (Fonda, 1981, p. 16).

The second case is that of Cherry Boone O'Neill (O'Neill, 1982). O'Neill, the oldest daughter of singer Pat Boone and Shirley Foley Boone, grew up in a close family with a father who was famous as an entertainer, and who had as part of his public identity, the reputation of an extremely devout fundamentalist Christian. Cherry's mother was a homemaker who remained at home rearing her four daughters, born at one year intervals. Cherry was an excellent student, very talented and attractive, who had several good friends. Her relationship with boys her own age was strictly limited by her father who both publicly and privately asserted his right to control his family's moral behavior. During the years when O'Neill began to develop an eating disorder, her parents had serious marital problems. Her father stated publicly that during this period, "I broke <u>every one</u> of the Ten Commandments." (This writer noted at the time the polarity of thinking represented by that statement.) O'Neill's life proceeded as

usual during this time, but her mother was not as attentive as usual, spending most of her time in prayer. Cherry tried to be the perfect child in an effort to please her parents and be a good example to her sisters.

One summer, when her father was away working, O'Neill began a diet to reduce her thighs. She took her mother's diet pills, at first with permission, later without permission. She also began a vigorous exercise program. After two weeks, her mother began complimenting her daughter's tenacity. O'Neill stepped up her program of exercise and dieting. However since appearance was very important to all of the Boone family, nothing was seen as out of the ordinary up to this point. The Boone daughters began singing with their father in engagements around the country, and Cherry enjoyed the work. It is unclear, however, whether the purpose of this family act was to enable the family to spend more time together, to provide professional experience for the daughters, to reactivate a sagging career for Pat Boone, or to show the world the refound unity in the Boone family life.

For Cherry, the turning inward began. While at

home, she planned her life around exercising and the avoidance of eating. If she ate, she would immediately calculate how many hours of exercise would burn the calories. She began vomiting immediately after eating and used laxatives in such quantities that she had to shop in different stores to avoid attention. Then, she began stealing laxatives from stores to avoid embarrassment. When her mother realized that Cherry had been stealing her diet pills, she confronted her and extracted a promise that she would stop. However, the behavior continued until the pills were removed from the house. Parental control tightened even more as Cherry was told to stop her dieting and lying and told to start turning to the Lord to meet her needs.

O'Neill felt that no matter what she had ever done, it was never good enough to approach the standard of perfection. It was relatively easy for her to please her mother who, in fact, blamed herself for Cherry's problems. The guilt is tremendous when your daughter is starving to death in the middle of Beverly Hills, California. Her father felt the problem was simply the strong will of his daughter who would not obey him. Cherry was by this time

under the care of the family physician, but he did not realize the seriousness of anorexia nervosa/ bulimia, and was perhaps in awe of Pat Boone's strong opinions on matters pertaining to his daughters.

While in her early 20's, O'Neill fell in love with a man her parents felt suitable. This was after several serious relationships were broken off because of parental pressure over the young men's religious beliefs. After much soul searching, she told her fiancee about her continuing anorexic/bulimic behavior. Dan O'Neill was supportive and encouraged her to fight the impulse to binge and purge. One evening, after dropping Cherry off at home after a date, Dan returned to retrieve a forgotten item and saw Cherry on the floor devouring scraps from the dog's dish. His revulsion and disgust were so strong that he did not know if he could cope with Cherry's illness any longer. She was terrified to lose the man she loved, and was filled with self-hate for the disgusting things she was doing to both her body and her spirit. Dan returned home to Seattle to visit his parents while he tried to deal with Cherry's illness. He consulted Dr. Raymond E. Vath, a specialist in anorexia nervosa.

Vath asserted that with the illness firmly entrenched after six years, Cherry must be removed from her parents' home to begin treatment. Although her parents were very opposed to psychiatric help of any kind (and her father still maintains this position), Cherry agreed that if she wished to marry Dan, she must move to Seattle and begin treatment. She moved in with Dan's parents, and long-term therapy began. Since she had been using all her talents, intelligence, and will to maintain her illness, it took several years of treatment to recover.

After years of vomiting many times a day, her teeth were erroded from the stomach acid. She was skeletal in appearance, guarded, surreptitious, and uncooperative. She regained physical strength and began to grow up emotionally. Cherry and Dan married, and treatment continued on a less frequent basis. Cherry considers that she was very fortunate to have been able to have a child since her physicians had not been optimistic.

The O'Neills have now changed their church affiliation to Catholic, a matter of constant conflict between them and Cherry's parents. This inter-generational conflict continues on many fronts. In

fact, in Starving For Attention, O'Neill gave her parents the opportunity to add their comments in a separate chapter. Shirley expressed her love and regrets that Cherry had to suffer all those years. Pat had a lengthy article which expressed his opinion that Cherry really was very strong willed and did not need psychiatric intervention. He also expressed his love and said that he hopes her daughter will be raised by the Bible so she will not bring grief to her parents. While on television to discuss this book, Cherry said that she hopes to encourage others to seek help and to realize that perfection is not possible to attain. She has found it difficult to stand beside her husband as an adult woman especially when to do so means that she must stand in opposition to her father. Her father still maintains that it is he who knows the correct path to follow in life, and he wants his guidance to be respected (O'Neill, 1982).

Measurement of Control

Control.

"inner self is entwined inextricably with social

context: They form a single unity" (Minuchin & Fishman, 1981, p. 78). Three of the basic emotional needs of people in our society are a sense of identity, relationships, and power (Arenson, 1984). One of the primary developmental issues then is the experience of control over one's own life and body. When such control is not experienced, a severe deficit in autonomy results which may originate from the distortion and mislabeling of feelings, sensations, and moods (Bruch, 1981). Therapy then, with those who have a developmental deficit in this area would have as its goal enhancing autonomy and individuation (Rosman et al., 1977). To carry this point one step further, if one had the goal of preventing anorexia nervosa and bulimia, one would plan an intervention at the pre-adolescent level to assist children in learning to recognize emotions and express them appropriately and directly. Assertiveness, effectiveness, and other interpersonal skills could be taught routinely in elementary schools much as the current "How to say 'no' to drugs" is being taught.

Position to control.

Several studies have investigated the role of

perception of position to control and the corresponding psychological interpretation of room density. Subjects who perceived that they were in a position to control operation of a crowded elevator felt significantly less crowded and saw the elevator as significantly larger than subjects not in position to control the elevator (Rodin, Solomon, & Metcalf, 1978). It was postulated that a psychological state of crowding exists when density restricts one's sense of personal control (Rodin & Baum, 1978). Diminished feelings of control in the home produced by chronic crowding have been associated with greater expectations of failure and fewer efforts at self-control (Rodin, 1976).

Illusion of Control.

Illusion of control was measured by Martin, Abramson, and Alloy (1984) in an experiment in which subjects did not have any actual control over the environment but were told that they did. Nondepressed females in the study showed an illusion of control for self and others, while depressed females showed an illusion of control for others but not for themselves. Since depression has been suspected as a

component of anorexia nervosa and bulimia, this finding is relevant to the present discussion.

Locus of control.

Locus of control (internal versus external) has been investigated through utilization of the Reid and Ware (1974) revision of the Rotter (1966) Locus of Control Questionnaire. The Reid-Ware Locus of Control Inventory was factored to three scales: Self-control, social systems, and fatalism. The test consists of 32 items of two questions each (Reid & Ware, 1973; 1974). In a study reported by Jeffrey (1974) overweight subjects with internal or external loci of control were equally effective in producing desired weight loss, but external locus of control was more effective in maintaining that weight loss.

Rost, Neuhaus and Florin (1982) found that bulimarexic women have a significantly discrepancy between their general sex role attitude and the ability to live in accordance with that attitude. This lack of congruence results in a profound sense of helplessness. The same study revealed an external locus of control for bulimarexic women, who also perceive others as superior to them. Moreover, these women

had a low internal locus of control for important aspects of their personal lives (Rost, Neuhaus, & Florin, 1982). It was unclear whether a cognitive dissonance could be responsible for altering attitude to correspons with actual behavior which was passive, dependent, and unassertive.

Summary of Review of Literature

The literature indicates that anorexia nervosa and bulimia are complex disorders which have as their predisposing and precipitating causes and associated characteristics, many factors including the patient's own nature, family interactions, socio-economic status, female sex, a need to be perfect in order to please others, low self-esteem, feelings of powerlessness, and low perception of control over the patient's own life. When anorexia nervosa and bulimia disorders have taken hold, a serious and potentially fatal chain of events begins which leads to a changed perception of self and the world. This changed perception may be due to both the physiological effects of the starvation and the self-hate and disgust which result from secret rituals of vomiting and

purging. Interpersonal relationships are profoundly disturbed as a result of the effects of the disorders. Lying, stealing, suspician, and hostility are displayed in people who previously were agreeable, compliant, pleasant, and obediant. However disasterous the attempt to take control of one's own life through controlling the calorie intake, the drive toward independence which was begun therein can be used as a signal to intervene and assist family members to become more healthy and differentiated from each other. If the family system will not or cannot change, the goal of treatment would be to assist the patient to separate from the family system through learning more effective ways of meeting personal needs.

The physical effects of the starvation must be dealt with at onset of treatment. Then therapy can continue to assist the patients to become aware of their needs as individuals, to learn that such needs are legitimate and must be met in order for them to live healthy lives, and to assist them to practice skills which will aid them in becoming more assertive and responsible. Because anorexics and bulimics are uaually intelligent and were able, before their illnesses, to be effective on behalf of <u>others</u>

in their lives, they can be assisted to become more effective on their own behalf. Once they are released from the effects of the starvation and realize that they, as human beings, are entitled to be fully functioning, they can begin the process of indivuation which has been so long delayed. As with all types of therapy for all kinds of physical and emotional disorders, the personality of the therapist combines with therapeutic techniques to assist the patients to become their best and most healthy selves.

Without exception, every author cited in this paper has mentioned the factor of control as related to anorexia nervosa and bulimia. Yet the reports of patients' feelings or perceptions of control were not investigated, only mentioned in passing. In this writer's conversations with over twenty anorexics/bulimics, the statement "<u>They</u> (parents) tried to control everything I did" and "I just wanted to control <u>something</u> in my life" were repeated persistantly. The control issue was raised over and over and without prompting. Therefore, this area needs to be investigated more fully if one is to understand anorexia nervosa and bulimia.

Definition of Terms

Anorexia/Bulimia.

A review of the literature shows that there is little concensus about the definition of and differentiation between the disorders called anorexia nervosa and bulimia (Vincent & Kaczkowski, 1984). Some authors subsume bulimia under anorexia nervosa (Bruch, 1973; 1977; 1978) while some believe that one is anorexic (restrictor) at one stage of illness and bulimic (binger/purger) at another stage (Landau, 1983; Wilson, 1983). Others refer to bulimarexia, a combined term (Boskind-White & White, 1983; Rost, Neuhaus, & Florin, 1982). The Diagnostic and Statistical Manual of Mental Disorders,Third Edition (DSM III) (American Psychiatric Association, 1980) defines the diagnostic criteria for anorexia nervosa as including intense fear of becoming obese, disturbance of body image, weight loss of at least 25% of body weight, refusal to maintain a normal weight for age and height with no known physical illness to account for the weight loss. DSM III diagnostic criteria for bulimia include recurrent binge eating, frequent weight fluctuations, chronic dieting, purging with laxatives, diuretics,

or vomiting, covert eating, inability to stop eating unless interrupted, preference for soft foods, depression following binges, and bulimic episodes not due to anorexia nervosa or other known physical disorder. This study used the EAT-26 to define subject category of anorexic, bulimic, or other eating disorder.

Perception of control.

It is the opinion of this writer that the actual amount of control which one has in a given situation is far less significant then the perceived control. Anecdotal report in this writer's counseling work supports the view that there is power in belief itself. Both cognitive and visceral reactions to a rough-looking man in an elevator will vary according to whether one perceives him to be a security guard or a drug addict for example. Likewise, when a person has a weapon close at hand, that person feels personal power differently from when the gun is known to be locked away. What then of the situation in which one believes the gun to be close at hand, but in reality it is not? This writer contends that in that situation, attitude remains that of a power position

or perception of control.

Perception of control is defined by this writer as follows: the awareness or understanding of one's ability to exercise directing influence over elements in the environment as measured by self-report. Whether this perception corresponds with actual fact or does not is not material to this discussion. It is the intuitive feeling of power or powerlessness which is relevant to the definition.

Statement of the Problem

Because it is clear from the literature that prognosis for recovery from anorexia nervosa and bulimia is optimal for the early onset and early intervention phases of the disorders (Bruch, 1981; Crisp et al., 1977), it has been argued that a preventive strategy could be effective in some cases. Possible areas for such an intervention would be (a) family interaction and (b) perception of control over environment, family, and peers. Since this researcher believes it to be impossible to motivate families toward changing the transactional patterns which ate implicated in anorexia and bulimia until

a crises has threatened, the individual perception of control in females is the area of focus for this project. This thesis has not been investigated probably because families of anorexics and bulimics who present themselves for treatment are already in crisis. This study will investigate perception of control over environment, peers, and families for females in an effort to determine whether significant differences exist between subjects who do not have an eating disorder and subjects who are identified as having an eating disorder.

Hypothesis

The following is hypothesized: There will be significant differences in perception of control over environment, family, and peers (as measured by the Perception of Control Questionnaire) between groups of anorexics/bulimics and noneating disordered individuals (designated $p < .05$). Stated in null form: THERE IS NO SIGNIFICANT DIFFERENCE BETWEEN MEAN SCORES ON THE PERCEPTION OF CONTROL QUESTIONNAIRE FOR THOSE FEMALES CLASSIFIED IN EATING DISORDER AND NONEATING DISORDER CATEGORIES.

CHAPTER III

METHOD

Subjects

The subjects were 72 white females who volunteered to participate in this study. These volunteers were taken from Psychology classes in Putnam City North High School, Oklahoma City, Oklahoma and from in-patient medical units for the treatment of anorexia nervosa and bulimia in a large hospital in Oklahoma City, Oklahoma and a large hospital in Dallas, Texas. The subjects ranged in age from 14 years to 37 years old ($\bar{X}$=18.24, SD = 3.32). Appendix A presents the age distribution of the subjects. Questionnaires were completed by 98% of the available participants.

Instruments

Subjects were assigned to subject groups by their responses on the Eating Attitudes Test (EAT-26)(Garner, Olmstead, Bohr, & Garfinkel, 1982). The EAT-26 is a 26 item measure of symptoms of anorexia nervosa which resulted from a factor analysis of the EAT-40 (Garner &

Garfinkel, 1979). The EAT-26 is presented in a self-report format using a six point forced choice scale. For each question, three points are scored for the extreme anorexic response with two and one points respectively being awarded for the adjacent responses. All other responses receive zero points.

The EAT-26 correlates highly with the EAT-40 (r= .98). Total score was found to correlate with criterion group membership (r=.87, $p<0.001$), suggesting a high level of concurrent validity. Recovered anorexic patients scored in the normal range of the test (Garner & Garfinkel, 1979).

A total score on the EAT-26 of 20 or more is used to classify individuals in the Eating Disorder group, while a score below 20 is used to classify individuals in the Non-Eating Disorder group. Individuals classified in the Eating Disorder category may be further classified according to a factor analysis of the test items which fall into three groupings. Factor I is a body-image variable which does not differentiate between anorexic and bulimic traits. Factor II is strongly related to bulimia and a score of 10 or more on this factor scale indicates bulimic behaviors. Factor III is related to anorexic behaviors and a score of 9 or more on this factor scale indicates anorexia.

Factor I is reported to be reliable ($alpha$=0.90)

and is highly correlated with the total EAT-26 (r=.93). On Factor II, bulimics score significantly higher than do anorexics ($\bar{X}$=10.6, SD=4.8 versus $\bar{X}$=5.2,SD=4.1; $p<.0001$). On Factor III, anorexics score significantly higher then do bulimics ($\bar{X}$=9.7, SD=5.5 versus $\bar{X}$=7.0, SD=5.7; $p<.0002$). The reliability (internal consistency) of the EAT-26 is high (alpha=0.90) (Garner et al., 1982). (See Appendix B for the EAT-26).

The Perception of Control Questionnaire (POCQ) (see Appendix C) measures, by self-report, perception of control in three areas: environment, family, and peer relationships. It was devised by this writer. From a survey of the literature, 30 test items were developed to reflect a range of issues which are pertainent to the everyday lives and concerns of young females who, the literature reports, are most likely to develop anorexia/bulimia. Test items were reviewed for content validity by a panel of four experts whose work is concerned with anorexia/bulimia and adolescent females. This panel was composed of a Bariatric Physician, a Psychology Professor, a Counselor, and a Nurse. One question was changed at their request to lessen ambiguity. The revised test was administered to a group of ten males and females for a review of item content to determine whether the test measured items relevant to their lives. Consensus was that item content was both relevant and

exhaustive for control issues in their lives.

Test items were presented in a Likert scale where responses were mutually exclusive and exhaustive. Subjects indicated whether the test item applies "always," "usually," "often," "sometimes," "rarely," or "never." A score of three was earned for an extreme response in the "low control" direction and a score of two and one respectively for the adjacent less extreme responses. Remaining response categories were given no score.

Procedure

Potential subjects were approached in groups and singly as opportunity permitted. The experimenter said:

> I am doing a research study of attitudes and would like volunteers to take a short questionnaire. Participation in this study is voluntary. If, after you look at the questionnaire, you do not want to fill it out, or if you want to stop in the middle, that is all right. This questionnaire will take about ten minutes to complete and is anonymous. Do not put your name on it. After you have completed the questionnaire and put it in this envelope, I will be glad to tell you more about this project.

After the questionnaires were collected, the experimenter discussed the research project with the subjects explaining the research process in general and this thesis in particular, including possible uses for this study. Tests were administered to all volunteers, however all responses from males were discarded.

CHAPTER IV

RESULTS

Introduction

Subjects were placed into Eating Disorder (N=32) and Noneating Disorder (N=40) groups based on their scores on the EAT-26. Table 1 presents the descriptive statistics by subject category for the EAT-26.

Each subject's POCQ protocol was scored for total score and subscores on Family, Environment, and Peers sub-scales with three points being given for the extreme response in the low perception of control direction and the two adjacent responses being given two and one points respectively. Other response categories were given a score of zero. (See Appendix E for scoring key for POCQ.) Table 2 presents the descriptive statistics by subject category for the POCQ.

Psychometric Properties of the POCQ

Reliability was calculated for the Family, Environment, and Peer subscales and for total score on the POCQ using Cronbach's alpha procedure. After the initial computation, it was apparent that seven test items were not

TABLE 1

EAT-26 Raw Scores by Subject Category

EAT-26 Score	Eating Disorder (N=32)	Noneating Disorder (N=40)
Factor I		
$\bar{X}$	23.094	5.700
SD	7.059	5.311
Range	10-37	0-18
Factor II		
$\bar{X}$	6.938	0.500
SD	4.892	1.830
Range	0-16	0-3
Factor III		
$\bar{X}$	6.000	2.500
SD	5.172	2.291
Range	0-20	0-9
Total		
$\bar{X}$	36.031	8.700
SD	11.751	5.836
Range	21-59	0-20

TABLE 2

POCQ Raw Scores by Subject Category

POCQ Score	Eating Disorder (N=32)	Noneating Disorder (N=40)
Family		
$\bar{X}$	5.469	2.950
SD	3.951	2.837
Range	3-17	4-16
Environment		
$\bar{X}$	3.969	1.925
SD	3.542	2.030
Range	3-12	1-14
Peers		
$\bar{X}$	5.406	2.050
SD	4.765	1.739
Range	0-15	0-7
Total		
$\bar{X}$	14.844	6.925
SD	10.978	4.548
Range	8-42	8-32

reliable and, therefore items 9, 11, 15, 16, 24, 28, and 30 were deleted. The remaining 23 items which composed the POCQ were then analyzed and the alpha coefficients were 0.6563 for Family subscale, 0.6143 for Environment subscale, 0.7596 for Peers subscale, and 0.8562 for the total questionnaire. These coefficients demonstrate a relatively high degree of internal reliability considering the small number of items (23) on the POCQ. For item analysis, see Table 3.

POCQ Ratings

The dependent variables of interest in this study were the ratings of perception of control on the Family, Environment, and Peers subscales and the total score on the POCQ. Four independent sample t tests were performed to compare the ratings of the Eating Disorder and Noneating Disorder groups on each dependent variable.

Family POCQ.

The results of this t test indicate that the Noneating Disorder group reported a significantly higher perception of control on the Family subscale

TABLE 3

Item Analysis

Item	Part	Mean/Diff	Std Dev	Corr(total)	Corr(part)
1	2	0.60	1.030	0.617	0.743
2	1	0.51	0.822	0.475	0.657
3	3	0.26	0.581	0.458	0.541
4	2	0.40	0.867	0.233	0.268
5	1	0.86	1.052	0.257	0.541
6	3	0.50	0.751	0.416	0.576
7	3	0.49	0.822	0.531	0.641
8	1	0.81	0.959	0.088	0.340
9		deleted			
10	2	o.43	0.836	0.706	0.774
11		deleted			
12	3	0.44	0.820	0.363	0.415
13	3	0.29	0.680	0.732	0.784
14	1	0.43	0.766	0.653	0.477
15		deleted			
16		deleted			
17	3	0.32	0.577	0.508	0.557
18	2	0.10	0.417	0.507	0.504
19	1	0.63	0.956	0.764	0.728
20	3	0.35	0.735	0.758	0.740
21	2	0.72	0.953	0.621	0.741
22	3	0.24	0.722	0.733	0.755
23	1	0.50	0.904	0.745	0.664
24		deleted			
25	1	0.24	0.544	0.341	0.534
26	3	0.65	0.754	0.293	0.313
27	2	0.58	0.835	0.318	0.484
28		deleted			
29	1	0.10	0.381	0.484	0.511
30		deleted			

Key: Part 1=Family, 8

Part 2=Environment, 6

Part 3=Peers, 9

(as indicated by a low POCQ score) than the Eating Disorder group, t (70)= 3.15, $p<.01$.

Environment POCQ.

Analyzed next were the mean differences in POCQ scores for the Environment subscale. This t test indicated that the Noneating Disorder subjects reported a significantly higher perception of control than the Eating Disorder subjects, t (70)= 3.07, $p<.01$.

Peers POCQ.

The perception of control with peers variable showed the strongest difference in mean scores of the three subscales. Noneating Disorder subjects reported a significantly higher perception of control on the Peers subscale than the Eating Disorder subjects, t (70)= 4.13, $p<.01$.

Total POCQ.

All subscores were combined to investigate the total perception of control ratings for the two subject groups. The data showed that the Noneating Disorder group reported a significantly higher perception of control with all variables than do those

in the Eating Disorder category, t (70)= 4.14, $p < .01$.

Summary.

In summary, it has been demonstrated that the subjects who were classified as having an eating disorder scored significantly lower on perception of control with their families, environments, peers, and on the total POCQ scale than did the subjects who were classified as Noneating Disorder subjects. Therefore, the hypothesis that there will be significant differences in the perception of control with family, environment, and peers between subjects who are categorized as having an Eating Disorder and those subjects categorized as Noneating Disorder was accepted. The Null hypothesis was therefore rejected.

CHAPTER V

DISCUSSION

This study indicated that females classified as eating disordered had a lower perception of control with their families, environment, and peers than do those classified as noneating disordered. Results of this study support the anecdotal data which have been reported in the literature. Bruch (1962) stated that a fundamental feature of anorexia nervosa is an all encompassing feeling of ineffectiveness on the part of the patient. Rost, Neuhaus, and Florin (1982) describe a "profound sense of helplessness" (p. 407) in those with an eating disorder. Rodin, Solomon, and Metcalf (1978) concluded that "Control does appear to be a central feature to much of human behavior" (p. 988).

Sugarman, Quinlan, and Devenis (1982) describe eating disorder symptomology as "an attempt to gain autonomy through an overaccentuation of the boundary between themselves and others" (p. 455). Bruch

(1981) makes a strong statement that people with eating disorders experience themselves as reacting to the demands of others instead of acting in response to their own inner impulses. Squire (1983) suggests that it is the perception of reality which dictates behavior. These articles just cited hypothesized about the role of perception of control in the lives of those with anorexia nervosa and bulimia, however there have been no research data to test this hypothesis until this study. The findings of significantly lower perception of control in the eating disordered group supports all the anecdotal information previously published, as well as providing an empirical basis for further study.

Implications

Since the purpose of research studies such as this one include explanation and prediction, this study has implications for the prevention, understanding, and treatment of anorexia nervosa and bulimia. The fact that these data were derived from self-report indicates a certain awareness on the part of the subjects of their behavior and their perceptions.

Certainly, Bruch's (1977) assertion that patients need help in becoming more autonomous and self-directed through making them more aware of their own inner impulses, feelings, and needs would be supported by the data collected in this study.

Since an apparently successful level of functioning is maintained by the eating disordered females prior to onset of the disorder, it would seem appropriate to investigate the perceptions of the subjects in order to devise an intervention strategy for prevention of eating disorders. Anorexia nervosa and bulimia are most commonly reported to be prevalent in upper-middle-class, intelligent, accomplished young women. What factor then is involved in those women's feeling powerless while acting competent?

The primary question to be resolved remains. Does the low perception of control demonstrated by these subjects classified eating disordered precede the development of the eating disorder, accompany it as a symptom, or result from the eating disorder? Can changing perception of control through therapy or the educational process prevent some cases of anorexia nervosa and bulimia from developing? Would assertiveness training or communication skills

training alter perception of control in a person who has been assessed as having actual control? If further investigation into this question results in a finding that low perception of control precedes the development of an eating disorder, it might be possible to intervene through existing classes in the public schools (Health, English, or Home Economics and Family Living) to teach students about family dynamics, communication skills, and assertiveness skills.

Future research is indicated into the psychometric properties of the POCQ so that it will be a more valid and reliable instrument for assessing perception of control in any area of research study. The Peers subscale seems especially promising and could be expanded.

Limitations

There are several possible sources of bias in this study. One must consider that the experimenter had limited access to a population with eating disorders due to the constraints of patient confidentiality which medical personnel uphold. The majority of subjects came from the Senior Psychology classes at

one high school. The potential subjects were asked to volunteer and since they were in school, may have felt unwilling to decline although every attempt was made to provide an atmosphere free of pressure. Three subjects declined to participate and three others did not complete the form correctly. Of the 57 subjects from the high school, a total of 19 (33.33%) scored in the eating disorder range which was a totally unexpected phenomenon. The high percentage of possible eating disorders in this group serves to underscore the seriousness of this area of research.

Possibly, confounding may have occurred due to an anorexic/bulimic subject's just beginning to manifest the disorders. Although Garner et al. (1982) report that the EAT-26 is sensitive to remission, it has not yet been determined if there is influence in the reverse direction. The remaining subjects (n=15) were obtained from two major hospitals which have in-patient anorexic/bulimic populations. Those groups also showed an unexpected phenomenon in that two of those subjects scored in the Noneating Disorder group on the EAT-26. All of the subjects over 19 years of age came from the hospitals' sources. The

introduction of female subjects from older age categories may have had an influence on the results.

Perhaps the greatest limitation of this study was the choice of the EAT-26 as the sole criterion for category membership. Diagnosis of an eating disorder is complicated and involves certain medical data as well as the psychological criteria. Although Garner et al. (1982) reported a high level of concurrent validity between the EAT-26 and criterion group membership ($r = .87$, $p < 0.001$), medical data such as height, weight, history, and the presence or absence of menses would be essential for a medical diagnosis of anorexia nervosa or bulimia.

Summary

The purpose of this study was to determine whether females categorized as having an eating disorder and those not categorized as having an eating disorder have significantly different perceptions of control with family, environment, and peers. Subject category was determined by responses on the EAT-26 and perception of control was measured by performance on the POCQ which was developed for this study.

The POCQ was determined to be an economical, valid, and reliable instrument for measuring perception of control by self-report.

Results of this study indicated that those subjects who were categorized as having an eating disorder had a significantly lower perception of control with family, environment, and peers than did those subjects categorized as not having an eating disorder. Whether this lower perception of control preceded the eating disorder, accompanied it, or resulted from it has yet to be determined.

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APPENDIXES

APPENDIX A

AGES OF SUBJECTS

Value	Frequency	Percent	Cumulative Percent
14	1	1.4	1.4
16	3	4.2	5.6
17	37	51.4	56.9
18	20	27.8	84.7
19	2	2.8	87.5
20	1	1.4	88.9
21	3	4.2	93.1
22	1	1.4	94.4
23	1	1.4	95.8
26	1	1.4	97.2
33	1	1.4	98.6
37	1	1.4	100.0

APPENDIX B

Eating Attitudes Test (EAT-26)

Instructions: Please place an (X) under the column which applies best to each of the numbered statemants. All of the results will be strictly confidential.

	Always	Usually	Often	Sometimes	Rarely	Never
1. Am terrified about being overweight.						
2. Avoid eating when I am hungry.						
3. Find myself preoccupied with food.						
4. Have gone on eating binges where I feel that I may not be able to stop.						
5. Cut my food into small pieces.						
6. Aware of the calorie content of foods.						
7. Particularly avoid food with high carbohydrate content(e.g. bread).						
8. Feel that others prefer if I ate more.						
9. Vomit after I have eaten.						
10.Feel extremely guilty after eating.						
11.Am preoccupied with a desire to be thin.						
12. Think about burning calories by exercise.						
13. Other people think that I am too thin.						
14. Am preoccupied with my body fat.						
15. Take longer than others to eat meals.						
16. Avoid foods with sugar in them.						
17. Eat diet foods.						
18. Feel that food controls my life.						
19. Display self-control around food.						
20. Feel that others pressure me to eat.						
21. Give too much time ans thought to food.						
22. Feel uncomfortable after eating sweets.						
23. Engage in dieting behavior.						
24. Like my stomach to be empty.						
25. Enjoy trying new rich foods.						
26. Have the impulse to vomit after meals.						

APPENDIX C

Perception of Control Questionnaire (POCQ)

Instructions: Please put an (X) under the column which applies best to each of the numbered statements. All of the results will be strictly confidential.
YOUR AGE IN YEARS____: YOUR SEX___.

	Always	Usually	Often	Sometimes	Rarely	Never
1. If my test is graded wrong, I ask teacher to change it.						
2. At home, no matter what I do, it is not good enough.						
3. I say things to friends I later regret.						
4. People like me can't change the world.						
5. At home, I have more "quiet talks" than "arguements."						
6. Friends have influence over what I do.						
7. I like to dress in what my friends wear.						
8. I can persuade my parents to do what I want.						
9. I can handle what happens to me.						
10. If something I buy is defective, I return it.						
11. At home, if someone tells me to do something, I do it.						
12. My friends get to do things I am not allowed to do.						
13. Peers would like me better if I changed.						
14. I pretend to agree with parents when I do not.						
15. If a teacher or boss tells me to do something, I do it.						
16. I read some books or magazines I must hide from my parents.						
17. I am not as talented as my peers.						
18. It is luck which determines things, not what people do.						
19. My parents expect more of me that I can do.						

APPENDIX C

Continued

	Always	Usually	Often	Sometimes	Rarely	Never
20. To please my friends, I do things I don't want to do.						
21. When I need directions, I ask someone right away.						
22. With my friends, I pretend to have things I don't have.						
23. Others in my family get their way more than I do.						
24. Good people can't change the world because of the bad.						
25. If I ask my parents, I can do the things I want to do.						
26. With my peers, I am a leader.						
27. The people can influence opinions of world leaders.						
28. I am as intelligent as most people.						
29. When shopping with parents, I can select to my taste.						
30. There will be wars, no matter what prople do.						

APPENDIX D

Scoring Key: EAT-26

Total score of 20 or more indicates an eating disorder.

Factor II: Bulimic behaviors.

When score totals 10 or more on questions numbered 3,4,9,18,21,26, the individual is classified as bulimic.

Factor III: Anorexic behaviors.

When score totals 9 or more on questions numbered 2,5,8,13,15,19,20, the individual is classified as anorexic.

Question Number	Points Scored	Always	Usually	Often	Some-times	Rarely	Never
1-24		3	2	1			
25					1	2	3
26		3	2	1			

APPENDIX E

Scoring Key: POCQ

Total points for subscales and total questionnaire.

Subscale: Family. Sum items numbered 2,5,8,14,19,23, 25 and 29.

Subscale: Environment. Sum items nimbered 1,4,10, 18, 21, and 27.

Subscale: Peers. Sum items numbered 3,6,7,12,13,17, 20, 22, and 26.

Delete items numbered 9,11,15,16,24,28,29.

Note: A high score indicates a low perception of control on this version of the POCQ.

Question Number	Points Scored					
	Always	Usually	Often	Sometimes	Rarely	Never
1,5,8,10,21,25,26,27.	0	0	0	1	2	3
2,3,4,6,7,12,13,14, 17,18,19,20,22,23,30.	3	2	1	0	0	0

VITA

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