

AN EXAMINATION OF PERSONALITY AND AFFECTIVE DIMENSIONS IN
WOMEN WITH INTRACTABLE EATING DISORDERS

by

LISA LORRAINE KING ELLIS

(Under the Direction of Dr. Rosemary Phelps)

ABSTRACT

This study examined differences in personality functioning, personality disorders, personality traits, and the affective dimensions of depression, anxiety, and introspective awareness between women with intractable anorexia nervosa and intractable bulimia nervosa. The *Millon Clinical Multiaxial Inventory-III* was used to measure personality functioning, personality disorders, depression and anxiety; while the *Eating Disorder Inventory-2* was utilized to assess interoceptive awareness, perfectionism, and ineffectiveness between the two groups of women with eating disorders. The 35 sample participants met the following inclusion criteria: (a) 18 years of age or older (b) currently have an eating disorder diagnosis (c) currently in treatment for an eating disorder (d) have had a diagnosable eating disorder for a minimum of 5 years. Non-parametric independent t-tests, chi-square, and descriptive statistics revealed differences on the Compulsive, Antisocial, and Sadistic scales between the two groups, but not all within the personality disorder range. Other findings suggested that significantly more women with intractable bulimia nervosa obtained clinically significant scores on the Antisocial scale than women with intractable anorexia nervosa. There were also indications that the two groups of women converged on the clinical significance of the scores on the following scales Dependent, Avoidant, Masochistic, and Depressive. Overall, the findings of this study indicate that while there are expected differences in personality functioning between the two groups of women, there are also clinically significant personality functioning and disorders that the two groups share which may suggest that women with intractable anorexia nervosa and women with intractable bulimia nervosa share more aspects of personality functioning than those women whose eating disorders are not intractable.

INDEX WORDS: Intractable eating disorders, Anorexia nervosa, Bulimia nervosa, Eating disorders, Personality disorders, Personality traits, Affect, Interoceptive awareness, Anxiety, Depression, Perfectionism, Ineffectiveness, *Millon Clinical Multiaxial Inventory-III*, *Eating Disorder Inventory-III*

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DEDICATION

I dedicate my dissertation to my husband, Gerald A. Ellis, for his unwavering love, support, and patience during my endeavor to complete my degree.

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CHAPTER 1

INTRODUCTION

In the last 25 years there has been a proliferation of research on eating disorders. Thus, anorexia nervosa and bulimia nervosa have become household words, receiving increased media attention, and closer clinical scrutiny. Eating disorders pose a considerable threat to those suffering from the condition (Striegel-Moore, 2001; Vitiello & Lederhendler, 2000; White, 2000). Though the eating disorders population is perceived as predominantly female and Caucasian, the number of men and other ethnic group members afflicted is rising. Compared to other major psychiatric disorders, eating disorders is a relatively new field of study; consequently, research in this area is less advanced. The complex nature of eating disorders, the lack of consensus on defining them as discrete or continuous disorders, symptomology, and rates of prevalence make it a difficult area to research. Statistics on individuals with eating disorders vary drastically with prevalence rate estimates as low as 1% to 4% (Brownell & Fairburn, 1995) and as high as 5% to 15% (Kachele, Kordy, & Richard, 2001).

Eating disorders produce vast emotional pain and suffering, resulting in greatly diminished quality of life in personal, interpersonal, financial, and medical realms (Piran, Levine, & Steiner-Adair, 1999). These disorders can also result in serious medical problems, including dental, heart, and digestive problems. In extreme cases, death can result. Anorexia nervosa has the highest death rate of any psychiatric disorder (Vitiello & Lederhendler, 2000).

Eating disorders are multidimensional, and multifaceted, with behavioral, cognitive, and affective domains. Despite the substantial body of literature that exists on eating disorders, understanding the etiology is far from complete. However, research suggests that there are certain variables that converge, increasing the risk of developing an eating disorder. Numerous theoretical models suggest the following risk domains: the sociocultural context (e.g., thin beauty ideal, gender roles), the familial and interpersonal context (e.g., family dynamics, adequacy of parenting, peer influences), traumatic life events (e.g., physical or sexual abuse), and personal vulnerability factors (e.g., genetic factors, temperament, personality traits, psychopathology) (Striegel & Moore, 2001). For many years the personal vulnerability domain has been investigated, indicating that personality factors are an important component in the development and maintenance of eating disorders (Vitousek & Manke, 1994). Although there have been methodological limitations with much of the empirical research in this area, some personality traits can be identified.

Specific personality traits (e.g., perfectionistic striving, rigidity, impulsivity) and affective factors (e.g., depression, anxiety) have continually been identified as correlates of subclinical and clinical forms of eating disorders (Hinz & Williamson, 1987; Steiger, Puentes-Newman, & Leung, 1991). Individuals with anorexia tend to be described as reticent, introverted, constricted, obsessive, and compulsive. Individuals with bulimia nervosa are characterized as social, impulsive, affectively labile, dramatic, and erratic. Perfectionism is a trait that is associated with both anorexics and bulimics (Vitousek & Manke, 1994). These findings are far from unequivocal, and some studies find that these traits overlap.

It is unclear whether affective disturbances contribute to or occur as a result of the onset of an eating disturbance; however, both anxiety and depression are associated with individuals with eating disorders. Some studies indicate that anxiety is present at a higher rate in anorexic populations; whereas, depression is more prevalent among individuals with bulimia (Podar, Hannus, & Allik, 1999). Clinical and empirical research indicate that for individuals with both types of eating disorders there is an extreme avoidance of negative emotions and an inability to identify, tolerate, regulate, or process emotional experiences. These combined factors of emotional avoidance and emotional dysregulation are identified in the literature as interoceptive awareness (Garner, 1991).

Many studies have examined the comorbidity of affective factors and personality traits with eating disorders; and extensive research exists on the prevalence of personality disorders in eating disordered patients, indicating widely divergent findings (Garner & Garfinkel, 1982; Orbach, 1986). The prevalence of personality disorders in anorexic patients has been reported to range from 0% to 85% (Frankel et al., 1988; Norman & Herzog, 1986; Pope et al., 1987). Prevalence estimates of personality disorders for individuals with bulimia have ranged from 31% to 87% (Garner, Marcus, Halmi, & Loranger, 1989; Piran et al., 1988; Wonderlich, Swift, Slotnik, & Goodman, 1990). Inconsistencies in prevalence rates may be attributed to the utilization of different instruments to measure personality disorders, assessing different clinical populations (e.g., inpatient vs. outpatient), vaguely defined eating disorder criteria, and small sample sizes. Despite these limitations, information has emerged from the research literature on personality disorders within the eating disordered population.

Research indicates that personality disorders have been shown to correlate with several aspects of both anorexia nervosa and bulimia nervosa (Braun, Sunday, & Halmi, 1994; Garner, Marcus, Halmi, & Loranger, 1989; Kennedy et al., 1995; Matsunaga, Kirike, Nagata, & Yamagami, 1998; Matsunaga et al., 2000; Wonderlich, Swift, Slotnick, & Goodman, 1990). Some of the literature on the relationship between personality disorders and eating disorders has focused on the association between obsessive-compulsive personality disorder and anorexia nervosa and between borderline personality disorder and bulimia nervosa (Westen & Harnden-Fischer, 2001). However, data on the occurrence of personality disorders in association with eating disorders are inconsistent and often fail to show the above mentioned relationships (Dolan & Norton, 1994; Skodol et al., 1993; Wonderlich, 1995).

Most of the studies that have examined the relationship between personality disorders and eating disorders have utilized the *Minnesota Multiphasic Personality Inventory-2* (MMPI-2), while relatively few studies have used the *Millon Clinical Multiaxial Inventory-III* (MCMI-III) to investigate the presence of specific personality disorders in individuals with eating disorders. Some of the MCMI findings have indicated that women with bulimia nervosa score significantly higher on the Borderline scale; while women with anorexia nervosa or anorexia nervosa with purging behaviors score higher on the Schizoid and Schizotypal scales (Kennedy, McVey, & Katz, 1990). Other studies utilizing the MCMI have found different results. For example, Norman, Blais, and Herzog, Hopkins, & Burns (1993) reported that women with bulimia nervosa score higher on the Dependent and Histrionic scales; whereas, women with anorexia nervosa or anorexia nervosa with purging behaviors score higher on the Avoidant scale.

Despite conflicting results, there is evidence that a subgroup of eating disordered patients display more enduring personality disorders which significantly impact their ability to recover from their eating disorder (Dennis & Sansone, 1997; Wonderlich, 1995). Approximately 33% of individuals seeking treatment for eating disorders fail to respond or respond poorly to treatment. These individuals are referred to as people with intractable eating disorders. Clinical observations suggest that these individuals may have a higher prevalence rate of personality disorders and have greater levels of severity than individuals who respond favorably to treatment. While literature examining the relationship between personality disorders and eating disorders exists, there are very few studies that have investigated this relationship among individuals with intractable eating disorders.

Statement of the Problem

Some eating disorders are transient while others become established and intractable. Despite the growing body of literature on eating disorders as they relate to personality traits, affective states, and personality disorders, there is relatively little information regarding how these variables relate to persons with intractable eating disorders. This population has not been the primary focus of research; however, some conclusions about this group have been made based on information provided by studies concentrating on variables other than the intractable aspect of the disorder. These variables have included the examination of treatment outcome, recovery, and relapse prevention (Blouin, et al. 1994; Collings & King, 1994; Fairburn, Marcus, & Wilson, 1993). What has emerged is the existence of a subgroup within the eating disorder population whose condition is intractable and appears to exhibit some or all of the

following characteristics: repeated lack of response to treatment, protracted eating disordered behaviors, failure to comply with treatment, and the lack of sustainable recovery without supervision, or subsequent follow-up treatment.

A number of outcome studies suggest that approximately 20% to 30% of anorexics have intractable conditions due to their lack of recovery after treatment (Bulik, Sullivan, Wade, & Kendler, 2000). Other studies indicate that the intractable aspect is a factor in determining treatment prognosis in eating disorders (Kachele, Kordy, & Richard, 2001). Other findings have indicated that the presence of personality features or traits rather than a personality disorder and a short interval between onset of symptoms and the beginning of treatment are also favorable prognostic indicators. Based on such research findings, a reasonable assumption may be that the presence of a personality disorder and a greater interval of time between the onset of symptoms and the beginning of treatment could negatively impact an individual's treatment prognosis, thereby, increasing the likelihood of developing an intractable eating disorder. Additional unfavorable treatment prognostic indicators also suspected of impacting the likelihood of developing an intractable eating disorder include the age of onset, affective disturbance, and a history of personality disturbance prior to the onset of the eating disorder.

A greater understanding of the relationship between intractable eating disorders and personality disorders is particularly important, given that individuals with comorbid personality pathology have a more severe course of illness, greater psychological distress, greater mood disturbance, and a slower recovery than those without comorbid personality disorders (Bulik, Sullivan, Wade, & Kendler, 2000; Westen & Handen-Fischer, 2001).

Purpose of the Study

The purpose of this study was to empirically examine various personality and affective dimensions associated with women who suffer from intractable anorexia nervosa and intractable bulimia nervosa. Specifically, this study sought to investigate personality disorders stratified by level of severity, anxiety and depression states, interoceptive awareness, ineffectiveness, and perfectionism. While many studies investigating eating disorders have included personality and affective dimensions, few have studied them in tandem with intractability.

This study examined women with intractable eating disorders because of the lack of general and integrated information in this area. This study has the potential to complement and expand the literature on eating disorders and personality disorders by investigating an overlooked subgroup (i.e., individuals with intractable eating disorders). This group of individuals is rarely the primary focus of empirical studies and referenced infrequently in the literature. Examining personality dimensions within the intractable eating disordered population will be a useful approach in attempting to better understand and meet the needs of up to 33% of individuals with eating disorders who seek treatment but are unable to find sustained relief from their symptoms.

Significance of the Study

This study is significant on a number of different levels. Of greatest significance is that this study can provide a bridge between empirical research and what has been observed clinically. Very often chasms exist between the research domain and the clinical domain. Sometimes, the findings of investigations are of marginal relevance or benefit to the clinicians working with the population being examined. Secondly, in terms of

etiology, risk factors, development, and maintenance of eating disorders, further inquiry into the role of intractability, personality and affective dimensions can assist in providing the type of information that can ultimately affect the type, quality, and effectiveness of treatment. Additionally, given the current focus on eating disorders and the expensive treatment costs, one would assume that researchers and clinicians are addressing eating disorder issues and examining the needs of those individuals with intractable eating disorders; however, there has been a paucity of available information.

Within the counseling psychology profession, the need to focus on eating disorders is long overdue. Kashubeck-West & Mintz (2001) acknowledge that while the number of articles regarding various aspects of eating disorders is burgeoning, until recently, there has been a dearth of such articles in the core journals of our discipline. In reviewing the literature in major counseling psychology journals (i.e., *Journal of Counseling Psychology*, *The Counseling Psychologist*), with the exception of an occasional article, counseling psychologists have a relatively short history of examining eating disorder concerns. In 2001, however, *The Counseling Psychologist* devoted an entire issue to eating disorders. The articles covered four main areas: etiology, assessment, prevention, and treatment, with notations for suggested future research for populations who do not respond to treatment, namely, individuals with intractable eating disorders (Stein et al., 2001). Hoteling (2001) wrote “Clearly the time has come for counseling psychologists to broaden our knowledge base regarding these [eating] disorders” (p. 421). She emphasizes the importance of eating disorders information for faculty, students, training programs, and clients. Root (2001) makes a call for counseling psychologists to take an active role in research, prevention, intervention, and the

dissemination of knowledge to other professionals. It appears that counseling psychologists recognize the need for further investigation in this area, but, as of yet, are doing little to investigate it. Conducting research in the area of eating disorders, especially with intractability as a variable, will better assist counseling psychologists in growing professionally and providing a greater understanding of what is necessary to meet the needs of clients with intractable eating disorders.

Research Questions and Hypotheses

The present study investigated the following research questions and null hypotheses:

Research Question 1

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa have different personality functioning?

Null Hypothesis:

1. There will be no statistically significant differences in personality functioning as measured by the Millon Clinical Multiaxial Inventory-III (Millon, 1994) for women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Research Question 2

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa have personality disorders that differ in level of severity?

Null Hypothesis:

1. There will be no statistically significant differences in the level of severity of personality disorders as measured by the Millon Clinical Multiaxial Inventory-

III (Millon, 1994) for women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Research Question 3

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa differ with respect to affective states?

Null Hypothesis

1. There will be no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to level of anxiety as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994).
2. There will be no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to depression as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994).
3. There will be no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to interoceptive awareness as measured by the *Eating Disorder Inventory-2* (Garner, 1991).

Research Question 4

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa differ with respect to personality traits?

Null Hypothesis

1. There will be no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to the personality trait of ineffectiveness as measured by the *Eating Disorder Inventory-2* (Garner, 1991).
2. There will be no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to the personality trait of perfectionism as measured by the *Eating Disorder Inventory-2* (Garner, 1991).

Definition of Terms

The following definitions are provided to clarify frequently used terms in this study:

1. *Intractable*: For the purposes of this study, individuals with intractable eating disorders are defined as those individuals who exhibit eating disorder behaviors and cognitions that are difficult to therapeutically treat, manage, or control. These individuals have struggled with anorexia nervosa, bulimia nervosa, or an eating disorder not otherwise specified for five years or more, with less than 3 months of sustained recovery at any point during the five-year time period. This term is also referred to in the eating disorder literature as “chronic”.
2. *Eating Disorder*: A psychological disorder as defined by the Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR) (American Psychiatric Association, 2000), indicating a variety of conditions characterized by serious disturbances in eating habits and appetitive

behaviors. The DSM-IV-TR lists three eating disorders: anorexia nervosa, bulimia nervosa, and eating disorders not otherwise specified.

3. *Anorexia Nervosa*: The defining features of anorexia nervosa are an intense and irrational fear of body fat and weight gain associated with an iron determination to become thinner, and a distortion of body weight and shape to the extent that a person may “feel” or perceive fat even when emaciation is clear to others. These beliefs result in the following symptoms: (a) refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected); (b) intense fear of gaining weight or becoming fat, even though underweight; (c) disturbance in the way in which one’s body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight; and (d) in postmenarcheal females, suffering from the condition of amenorrhea (i.e., the absence of at least three consecutive menstrual cycles). A woman is still considered to have amenorrhea if her periods only occur following hormone (e.g., estrogen) administration. There are two subtypes of anorexia nervosa based on behaviors exhibited during the current episode: (a) restricting type, which involves no regular engagement in binge eating or purging behavior; and (b) binge-eating/purging type, involving regular engagement in binge

eating or purging behavior. For the purposes of this study, both restricting and binge-eating/purging type are included as participants.

4. *Bulimia Nervosa*: This condition is characterized by self-perpetuating and self-defeating cycles of binge-eating and purging. During a binge, a person consumes a large amount of food in a rapid, automatic, and out-of-control manner. This may initially anesthetize hunger, anger, and other feelings; however, it can eventually create physical discomfort and cause anxiety about weight gain. Thus, a person purges the food eaten, usually by inducing vomiting or by resorting to a combination of restrictive dieting, excessive exercising, laxative use, diuretics, or some other compensatory behavior. There are two subtypes of bulimia nervosa based on behaviors exhibited during the current episode: (a) purging type whereby during the current episode of bulimia nervosa the person has regularly engaged in self-induced vomiting or the misuse of laxative diuretics or enemas, and (b) nonpurging type whereby during the current episode of bulimia nervosa, the person has used other inappropriate compensatory behaviors (e.g., fasting, excessive exercise, diet pills or supplements) but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.
5. *Eating Disorder Not Otherwise Specified*: This category is for eating disorders that do not meet the criteria for any specific eating disorder. Examples include: (a) all the criteria for anorexia nervosa are met except that the individual has regular menses, (b) all the criteria for anorexia nervosa are met except that, despite significant weight loss, the individual's

current weight is in the normal range and/or not 85% less than the expected body weight given age and height, (c) all the criteria for bulimia nervosa are met except that the binge eating and inappropriate compensatory behaviors occur at a frequency of less than twice a week or for a duration of less than 3 months, and (d) the regular use of inappropriate compensatory behaviors by an individual of normal body weight after eating normal or small amounts of food that do not constitute a binge (e.g., self-induced vomiting after the consumption of two cookies). For the purposes of this study, subtypes in the eating disorder not otherwise specified category will be subsumed under either the anorexia nervosa or bulimia nervosa category based upon which eating disorder the behavioral symptoms most closely resemble.

6. *Personality Disorder*: Clark, Vorhies, and McEwan (1994) suggest that, “What differentiates the ordered from the disordered personality is not its component traits per se, but whether the trait expression is moderate or extreme, flexible or rigid, adaptive or maladaptive” (p. 114). This definition suggests that maladaptiveness is influenced by traits that are extreme, rigid, overly inflexible, or a combination of the three.
7. *Onset*: This term is defined as the beginning of eating disordered symptoms as indicated by any of the symptoms outlined in the definitions of anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified.
8. *Treatment Episode*: This phrase refers to a discrete passage of time indicating a period of inpatient hospitalization, partial hospitalization, intensive outpatient treatment, outpatient treatment, or individual therapy.

9. *Interoceptive Awareness*: This term refers to confusion and apprehension in recognizing and accurately responding to emotional states. It also addresses uncertainty in the identification of certain visceral sensations related to hunger and satiety.
10. *Ineffectiveness*: This term refers to feelings of general inadequacy, insecurity, worthlessness, emptiness, and lack of control over one's life.
11. *Perfectionism*: This term refers to the extent to which one believes that personal achievements should be superior. It is also the belief that only the highest standards of personal performance are acceptable and that outstanding achievement is expected by others (e.g., parents, teachers, intimates).
12. *Treatment Setting*: This term refers to the specific type of environment in which an individual is receiving treatment. Type of treatment setting includes inpatient, outpatient, partial, or individual treatment.

Delimitations

The following delimitations were present in this study:

1. It was delimited to participants who sought treatment.

Limitations

1. This study used a convenience sample of women who have sought treatment at inpatient, partial hospitalization, and outpatient facilities. The differences in treatment settings may indicate a difference in eating disorder severity among the sample, population, which might serve as a confounding variable. The confounding variable may impact generalization of findings within the group being studied based on

treatment setting. There are also between group issues, in that the findings may not generalize to women with an intractable eating disorder in the general population who have not sought treatment in the past, are presently not in treatment, or who do not have access to psychological treatment.

2. The outcome of this study may have been influenced by the fact that participation in the study was voluntary.

Assumptions

1. Self-report questionnaire responses were completed in an honest and accurate manner.
2. Self-report instruments utilized in the study accurately measured personality traits, affective states, and personality disorders.

CHAPTER 2

REVIEW OF LITERATURE

The literature review consists of four sections (a) eating disorders, (b) personal vulnerability domain, (c) intractability, and (d) assessment instruments.

In the past two decades, there has been a growing public and professional awareness of eating disorders. Increased awareness has led to a proliferation of research and clinical writing, as well as improved patient care and treatment. The classification of eating disorders has also expanded over time. Presently, there are three general classifications of eating disorders as defined by the Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR) (American Psychiatric Association, 2000): (a) anorexia nervosa, (b) bulimia nervosa, and (c) eating disorder not otherwise specified. What is presently recognized as anorexia nervosa was first described as a new “condition” in 1888 and viewed as a “nervous disease” or somatic problem (Striegel-Moore, & Cachelin, 2001).

The investigation of anorexia nervosa has passed through several phases. Early this century, anorexia nervosa was viewed solely as a form of pituitary disease. Next, it was perceived as a nonspecific variant of many other forms of psychiatric disorders; and the current view is that it is a specific syndrome with core clinical features that distinguish it from other conditions and disorders. The earlier view of anorexia nervosa as a medical disease remained dominant until a biopsychosocial theory was introduced that emphasized the role of developmental factors and family dynamics (Bruch, 1973, 1978).

A cultural model was later proposed which directly challenged the medical model. The cultural-based model described anorexia nervosa as resulting from women's subordinate role in a male dominated society, the influence of media, and the emphasis on thinness as a beauty ideal (Bordo, 1993; Chernin, 1985; Orbach, 1986). Although a number of theoretical models have been introduced, empirical work has lagged behind (Garner & Garfinkle, 1982; Garner & Garfinkel, 1985).

Bulimia nervosa was introduced in the late 1970s as a variant of anorexia nervosa. The seemingly sudden appearance of bulimia nervosa reinforced the belief that culture plays a major role in the development and maintenance of eating disorders. With further investigation, however, it was discovered that there were differences in presentation and personality functioning between individuals suffering from anorexia nervosa and persons diagnosed with bulimia nervosa. As a result of findings from various studies, bulimia nervosa was no longer viewed as a variant of anorexia nervosa, but as a separate and discrete category. It should be noted, however, that the view that anorexia nervosa and bulimia nervosa represent discrete categories is presently being challenged by newer research that contends that the two conditions are instead different points of reference on a continuum of eating behaviors (Brownell & Fairburn, 1995; Marino & Zinarini, 2001).

At least one-third of those individuals presenting for treatment of an eating disorder do not meet all of the criteria for either anorexia nervosa or bulimia nervosa but share the central characteristic of a persistent disturbance of eating or eating-related behaviors resulting in the altered consumption or absorption of food that significantly impairs physical health or psychosocial functioning. These individuals are included in the

eating disorder not otherwise specified category. The following section offers a description of each type and subtype of eating disorder.

Eating Disorders

The Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR) (American Psychiatric Association, 2000) indicates a number of psychological conditions characterized by serious disturbances in eating habits and appetitive behaviors. The DSM-IV-TR lists three eating disorders: anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified.

The defining features of anorexia nervosa are an intense and irrational fear of body fat and weight gain, an iron determination to become thinner and thinner, and a distortion of body weight and shape to the extent that a person may “feel” or perceive fat even when emaciation is clear to others. These psychological characteristics contribute to drastic weight loss and defiant refusal to maintain a healthy weight given the individual’s height and age. There are two subtypes of anorexia nervosa based on behaviors during the current episode: (a) restricting type, which involves no regular engagement in binge eating or purging behaviors; and (b) binge-eating/purging type, which involves regular engagement in binge eating or purging.

Bulimia nervosa is characterized by self-perpetuating and self-defeating cycles of binge-eating and purging. During a binge the person consumes a large amount of food in a rapid, automatic, and out-of-control manner. This may anesthetize hunger, anger, or other feelings; however, it eventually creates physical discomfort and anxiety about weight gain. Thus, the person purges food that has been eaten, usually by inducing vomiting or by resorting to a combination of fasting, excessive exercising, laxatives, and

diuretics. There are two subtypes of bulimia nervosa based on behaviors during the current episode: (a) purging type, whereby the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas; and (b) nonpurging type, whereby the person has used other inappropriate compensatory behaviors (e.g., fasting, excessive exercise) but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

Eating disorder not otherwise specified is characterized by behaviors that do not discretely fit into any of the other eating disorder categories. This term often refers to individuals who may meet most but not all of the criteria necessary for a diagnosis of anorexia nervosa or bulimia nervosa and is sometimes referred to as “partial syndrome eating disorder” (Shisslak & Crago, 1994, p. 421). This term may also include individuals who exhibit behaviors that are some combination of the aforementioned eating disorders. Examples include but are not limited to behaviors such as purging without bingeing and restrictive behaviors without being significantly underweight. Body weight in this category may vary from normal to overweight.

For the purposes of this study, individuals identified as having a diagnosis of an eating disorder not otherwise specified and exhibiting “partial syndrome” anorexia nervosa or bulimia nervosa, will be categorized as an individual with either anorexia nervosa or bulimia nervosa. There is theoretical as well as empirical precedence for this type of grouping of individuals with eating disorders. Since eating disorders were first included in the DSM-III (American Psychiatric Association, 1980) each subsequent edition has contained different criteria from that which preceded it. Further complicating this issue is the severity and exclusion criteria specified in the DSM. Each edition of the

DSM has required increasing levels of severity for a diagnosis of anorexia nervosa or bulimia nervosa, and the current criteria have been criticized as too exclusive because many individuals who seek treatment do not meet the severity criteria required for anorexia nervosa or bulimia nervosa diagnoses (Kashbuck-West & Mintz, 2001).

Individuals exhibiting “partial syndrome eating disorders” are extremely similar to the formal diagnosable groups of anorexia nervosa and bulimia nervosa with the exception of degree of severity and frequency of behavioral and cognitive symptoms. For example, the criteria for bulimia nervosa require that an individual binges and purges twice a week for 3 months, despite evidence that individuals who binge once a week are similar on most relevant dimensions (Bulik, Sullivan, & Kendler; 2000). Furthermore, since relatively few individuals with eating disorders seek treatment, the result is a relatively small population from which to seek research participants. Therefore, a few studies have grouped individuals who fall into the eating disorder not otherwise specified or partial syndrome category into either the anorexia nervosa or bulimia nervosa category for the purpose of sample size and due to the degree of similarity on most relevant characteristics (Bulik, Sullivan, Wade, & Kendler 2000; Kendler, 1991).

Literature that Supports Examination of Personal Vulnerability Domains

The etiology of eating disorders is multidimensional and multifactorial in nature, comprised of behavioral, cognitive, and affective components. A review of the literature within the field indicates that the development and maintenance of the disorder is based upon four primary domains: (a) sociocultural, (b) familial and interpersonal,

(c) traumatic life events, and (d) personal vulnerability factors. The scope of this study was to further investigate independent variables within the personal vulnerability domain (i.e., personality traits, affective traits, personality disorders).

Personality Traits

Clinical observation has long suggested a link between personality factors and eating disorders. Research also supports this association, consistently linking anorexia nervosa, non-purging type, with personality traits such as introversion, conformity, perfectionism, rigidity, and obsessive-compulsive personality features. Research indicates some overlap for bulimia nervosa, suggesting shared traits between the two eating disorders (e.g., shyness, compliance) (Casper, 1990; Vitousek & Manke, 1994; Westen & Harnden-Fischer, 2001). However, research has often found the personality traits of extroversion, impulsiveness, and affective instability unique to individuals with bulimia nervosa (Fichter, Quadflieg, & Rief, 1994; Vitousek & Manke, 1994).

Of particular interest are those personality traits that have been considered important factors in the development as well as the maintenance of eating disorders. Some of the personality traits that have emerged have been fairly constant, and have pertained to all categories of eating disorders. Two such personality traits are ineffectiveness and perfectionism. Bruch (1973, 1978) originally described the overwhelming sense of ineffectiveness as the underlying disturbance in eating disorders. This construct has been prevalent in clinical observations and investigations of personality traits associated with eating disorders (Garner & Bemis, 1985). Ineffectiveness is conceptually very closely related to poor self-esteem or negative self-evaluation, but goes beyond these constructs to include feelings of emptiness and

aloneness. Ineffectiveness reflects a significant deficit in self-esteem as a result of intense feelings of inadequacy. Another personality trait that has been researched is perfectionism (Brusch, 1978; Garner, 1991). It is a constant that has been found among all eating disorders. Some studies suggest, however, that the degree of perfectionism varies based on the specific eating disorder and eating disorder subtype (Garner, 1991; Slade, 1982). Some research indicates that perfectionism is a critical condition that sets the stage for the development of both anorexia nervosa and bulimia nervosa (Garner, 1991).

Affective Traits

Studies suggest that women with eating disorders also frequently have symptoms of depression, anxiety, and other affective instability conditions (Casper, et al., 1980; Cooper et al., 1988; Hudson, Pope, Jonas, & Yurgelun-Todd, 1983; Vitousek & Manke, 1994). Common findings of studies investigating affective factors of individuals with anorexia nervosa indicate symptoms of depressed mood, irritability, social withdrawal, loss of sexual libido, preoccupations, obsessive ruminations and rituals, and eventual reduced alertness and concentration. The dysphoria commonly described in such studies is believed by some clinicians to be an integral aspect of the disorder, unwarranted of a separate mood or anxiety disorder. For some individuals with eating disorders, such symptoms are alleviated with nutritional rehabilitation. For others, the symptoms persist after treatment and recovery. Still for others, a detailed history reveals a premorbid mood disorder (Brownwell & Fairburn, 1995; Cooper, 1995).

Other studies suggest that women with eating disorders tend to also receive comorbid Axis I diagnoses (e.g., depression, anxiety, other affective instability

conditions) (Casper et al., 1980; Cooper et al., 1988; Hudson, Pope, Jonas, Yurgelun-Todd, 1983; Vitousek & Manke, 1994). A number of studies on depressive disorders among patients with eating disorders have been conducted. One of the problems with these studies has been the variance in the type of assessments used. Some studies utilize self-report measures, while others conduct semi-structured interviews in which the diagnostician assesses the presence of a mood disorder. The reported rates of depressive disorders vary markedly between studies, most likely reflecting the variance in type of assessment utilized (Cooper et al., 1988; Cooper, 1995). However, in all studies an overall high rate of depression has been found; and averaging across studies, it appears that about half of the people with eating disorders who are seen in treatment facilities have a lifetime history of major depressive disorder (Cooper, 1995). This rate is substantially higher than that found in nonpsychiatric control groups. In other studies in which the temporal relationship between the eating disorder and the depressive disorder has been determined, the mood disturbance has been found to precede the eating disorder in a small number of cases (Garner & Garfinkle, 1997). Furthermore, when patients in remission and patients in the acute phase of the disorder are compared, the latter show markedly higher rates of a depressive disorder. Studies that have examined the rate of depressive disorders among patients with different subtypes of eating disorders have generally found a specific association with bulimic symptoms. For example, in one study 15% of the subjects with anorexia-restricting type had a depressive disorder history, compared with 46% of both those with the bulimic subtype of anorexia nervosa and those with bulimia nervosa (Laessle, et.al., 1987). Other studies have produced similar findings, except that in some studies the rate of depressive disorders has been found to be

especially high among those with the bulimic variant of anorexia nervosa (Wonderlich, 1995). It still remains unclear whether a mood disorder, particularly depression, is due to the presence of the eating disorder or if it is a separate condition independent of the eating disorder.

There are conflicting opinions regarding whether the depressive symptoms that occur in patients with eating disorders arise as a secondary consequence of the eating disorder or are a separate unrelated disorder. Research suggesting that depressive symptoms are secondary to the eating disorder is supported by several lines of evidence. First, few studies show that the depressive disorder predates the onset of the eating disorder. Second, the depressive disorder is not equally likely to occur across all types of eating disorders, but is instead primarily prevalent in the bulimic variants. Third, depressive symptoms and depressive disorders are much more prevalent in the acute phase of eating disorders than in periods of remission. These symptoms often resolve themselves during periods of remission or recovery from an eating disorder. Fourth, the pattern of depressive symptoms in patients with eating disorders is quite different from the pattern in patients with major depressive disorder.

Anxiety symptoms are also common among patients with eating disorders. However, certain anxiety disorders are more prevalent than others. The most reported comorbid condition for anorexia nervosa is obsessive-compulsive disorder (OCD). Studies that have focused on patients with anorexia nervosa have found that between 9% and 69% of subjects with anorexia nervosa has a coexisting diagnosis of obsessive compulsive disorder (Von Ranson, Kaye, Weltzin, Rao, & Matsunaga, 1999). In a study of 68 patients exhibiting symptoms of both anorexia nervosa and bulimia nervosa, 37%

of those with anorexia nervosa had obsessive compulsive disorder; and 19% were found to have premorbid obsessive compulsive disorder. Individuals with a premorbid obsessive compulsive disorder were diagnosed approximately five years earlier than the anorexia nervosa diagnosis was made. Comparatively, only 3% of those with bulimia nervosa had obsessive compulsive disorder (Thornton & Russel, 1997). In contrast, other studies indicate that 8% to 33% of subjects with bulimia nervosa also have obsessive compulsive disorder.

The cause of the high rate of obsessive compulsive disorders in individuals with eating disorders is not known. Some investigators have postulated that preoccupations with weight and shape are types of obsessions and that uncontrollable binge eating and purging episodes might be compulsions that contribute to the development and maintenance of eating disorders (Kaye, Gwirtsman, George, & Jimmerson, 1986; Leitenberg, Gross, Peterson, & Rosen, 1984).

Based on years of clinical observations and a study by Westen & Harden-Fischer (2001), it is suggested that individuals with eating disorders possess specific affective profiles. How one interacts with the environment on an emotional level, emotional awareness, emotional confusion, and ability to tolerate emotional states are highly correlated with whether there is a display of anorexic or bulimic behaviors. Those with anorexic symptoms tend to be overcontrolled and restricted in their awareness of and ability to emote. On the other hand, those with bulimic symptoms tend to be dysregulated, emotionally undercontrolled, and often emotionally confused.

The rate of depressive symptoms, anxiety, and interoceptive awareness has consistently been found to be high in patients with eating disorders. However, a careful

examination of the pattern of symptoms associated with the pathology of patients with eating disorders, the timing of the onset of comorbid disorders, and the response to treatment of patients who have or do not have a comorbid diagnosis suggests that the depressive and anxiety symptoms in patients with eating disorders are generally secondary to the core disturbance of eating disordered habits and ideation. Appropriate affective modulation is a skill that has not been taught or modeled appropriately for individuals with eating disorders. Often the difficulties are found within their family of origin. The family system either invalidated, non-verbally indicated that the expression of emotions was “bad”, or responded in a chaotic or emotionally inappropriate manner (Bemis, 1978; Rosch, Crowther, & Graham, 1992; Vandereycken, 1995).

Personality Disorders

Research on eating disorders has examined the relationship between eating disorders and personality disorders, documenting a considerable, yet highly variable comorbidity. Rates range from 21% to 97% for the presence of a personality disorder in patients with various eating disorder diagnoses. There is a prevalence of Axis II disorders, particularly among women with bulimia nervosa (Vitousek & Manke, 1994; Wonderlich, Swift, Slotnick, & Goodman, 1990; Yates, Sieleni, Reich, & Brass, 1989).

A series of studies have been conducted investigating the presence of personality disorders in individuals with active eating disorders and those recovered from an eating disorder (Steiger & Stotland, 1996; Wonderlich, Fullerton, Swift, & Klein, 1994). Results of some studies indicate that 26% of recovered eating disordered individuals receive a diagnosis of a personality disorder compared to 51% to 74% of those with active eating disorders (Matsunaga et al., 2000). One possible explanation for the difference in the

incidence rates between the two groups is that the rate of personality disorders may be higher in a chronically ill sample. In another outcome study the researchers were able to distinguish between the characteristics of individuals recovered from eating disorders and individuals with chronic anorexia nervosa. The study associated personality traits of high harm avoidance with chronic anorexia nervosa (Bulik, Sullivan, Wade, & Kendler, 2000).

There is also considerable research interest in the role of obsessive-compulsive personality disorder in anorexia nervosa, due in large part to the high incidence of obsessive compulsive behaviors that tend to be a central behavioral component of eating disorders, particularly in association with anorexia nervosa. However, one study examining the presence of obsessive compulsive disorders among groups of bulimic individuals found a 25% premorbid rate of the disorder among persons suffering from bulimia nervosa and a continued elevation of obsessive compulsive disorder even when individuals had fully recovered from bulimia nervosa (Von Ranson, Kaye, Weltzin, Rao, & Matsunaga, 1999).

Theories Explaining The Intractable Phenomenon

Although it is clear that some eating disorders are transient while others become established or even chronic, virtually nothing is known about the personality traits, pathology, or affective factors of individuals with intractable eating disorders. At present three views on the maintenance and intractability of eating disorders have been posited. The cognitive view suggests that cognitive distortions concerning the extreme importance of weight and body shape make most of the other features of the disorder explicable. According to this view, these cognitive distortions maintain the disorder, and recovery is only possible if there is a change in body image attitudes. This cognitive view based on

cognitive distortions constitutes the underlying rationale for the successful cognitive behavioral approach to the treatment of bulimia nervosa, and it has received some direct empirical support (Brownwell & Fairburn, 1995; Garner & Garfinkel, 1985; 1997).

The second view suggests that interpersonal events have an important influence on the course of an eating disorder. This view has only indirect support, derived from the finding that changes in relationships and social circumstances observed during the course of family therapy for anorexia nervosa and interpersonal psychotherapy for bulimia nervosa appear to have beneficial effects on the course of these two eating disorders (Brownwell & Fairburn, 1995; Dare & Eisler, 1995; Garner & Garfinkel, 1997). Of course the cognitive and interpersonal views are not mutually exclusive, and it may well be that interpersonal events occur, undermining an individual's self-esteem, which in turn leads to the establishment of cognitive distortions.

The third view is primarily physiologically based and applies mainly to anorexia nervosa. This view suggests that starvation-induced changes in physiological and psychosocial functioning perpetuate the disorder. Individuals with anorexia nervosa develop a range of abnormalities that appear to be the direct result of starvation; and some of these abnormalities, it is suggested, are likely to perpetuate the disorder. For example, delayed gastric emptying may enhance the perception of the sensation of fullness, thereby inhibiting eating. The process then causes an effect on mood, which is likely to enhance the perception of fullness thereby inhibiting eating, all of which is likely to increase concerns about appearance and self-worth.

Literature Examining Measurements to Assess Personal Vulnerability Dimensions

The examination of personality disorders within the eating disorder population has primarily been through the extensive use of the *Minnesota Multiphasic Personality Inventory-2* (MMPI-2; Butcher et al., 1989). This widely used instrument allows a clinician to thoroughly assess the personality characteristics and psychopathology of an individual. The MMPI-2 has an extensive research history. Initial research using the MMPI with eating disordered populations focused on clinical elevations, with Scales 2 (Depression), 4 (Psychopathic Deviation), 7 (Psychasthenia), and 8 (Schizophrenia) emerging as the most prominent elevations (Prather & Williamson, 1988; Rosch, Crowther, & Graham, 1992; Vitousek & Manke, 1994). Although no modal two-point code types for anorexic and bulimic populations have been identified (Root & Friedrich, 1989), research has suggested at least two groups of bulimics. The first group is comprised of a more severely disturbed group of individuals who often have personality disordered features or traits and are significantly affectively impaired. The second group is composed of severely depressed individuals (Rosch, Crowther, & Graham, 1992; Rybicki, Lepkowsky, & Arndt, 1989).

To date the most popular instrument measuring personality dimensions associated with eating disorders has been the *Minnesota Multiphasic Personality Inventory* (Casper, Hedeker, & McClough, 1992; Hurt et. al, 1993; Brun-Eberentz, Commerfold, Samuel-Lajeunesse, & Halmi, 1997; Schork, Eckert, & Halmi, 1994; Shisslak, Pazda, & Crago, 1990). The *Eysenck Personality Questionnaire* (Wade et al., 1995), Tellegen's (1982) *Multidimensional Personality Questionnaire* (MPQ; Pryor & Wiederman, 1996), and

Cloninger's (1987) *Tridimensional Personality Questionnaire* (Brewerton, Hand, & Bishop, 1993; Bulik, Sullivan, Weltzin, & Kaye, 1995) have also been used. It is surprising, however, that the *Millon Clinical Multiphasic Inventory-III* (MCMI-III) has not been more widely used since it has a theoretical basis from which it was developed; and the results provide a very detailed picture regarding an individual's personality functioning in terms that are easily extrapolated to the *Diagnostic and Statistical Manual of Mental Disorders* 4th ed.

Results from two older studies using the original version of the MCMI indicated that anorexic subjects evidenced a higher frequency of avoidant personality disorder behaviors. They were also more passive-aggressive, depressive, and evidenced some paranoid, schizoid, and self-defeating personality patterns. Bulimic subjects had significantly higher frequencies of dependent and histrionic personality disorder diagnoses, along with some narcissistic personality features (Kennedy, McVey, & Katz, 1990; Norman, Blais, & Herzog, 1993). Another study utilizing the revised MCMI-II found that women with bulimia nervosa displayed relatively higher scores on the histrionic and borderline scales. Women with anorexia, however, had distinctly higher scores on the dependent and compulsive scales (Wiederman & Pryor, 1997). These patterns are consistent with clinical descriptions and previous research using different personality instruments for both anorexic and bulimic subjects.

Summary Description of the Central Variables for this Study

The variables to be examined in the current investigation are personality traits, affective states, personality disorders, eating disorder symptomatology, duration, history, and treatment. *The Diagnostic and Statistical Manual for Mental Disorders* 4th ed.

(American Psychiatric Association, 2000), defines personality along a continuum by which personality traits are “enduring patterns of perceiving, relating to, and thinking about the environment and oneself, exhibited in a wide range of important social and personal contexts” (2000, p. 630). Millon (1982, 1985, 1994) shares a similar perspective regarding the definition of personality disorders. Personality disorders develop when personality traits become rigid and maladaptive, and cause either significant impairment in social or occupational functioning or subjective distress (APA, 2000). Personality disorders have been examined in numerous studies. They have been found to be positively related to long-term psychological and emotional impairment (e.g., ineffectiveness, perfectionism, depression, anxiety, and interoceptive awareness, (Benjamin, 1993).

Researchers have studied how personality disorders influence the development and maintenance of eating disorders. They have found that there is often comorbidity between personality disorders and affective impairment. Although the presence of a personality disorder is clinically believed to complicate treatment, this is not conclusively supported by empirical study. Matsunaga et. al., (2000) and others reported a considerable proportion (26%) of subjects recovered from eating disorders showed significant severity in personality pathology, enough to qualify for a personality disorder diagnosis, while those with active eating disorders still had a significantly higher rate of personality disorders (51% to 74%). The difference in rates suggests a relationship between the two phenomena, a prediction of poor treatment outcome for individuals with eating disorders, and a higher incidence of personality disorders in the chronic eating disordered population.

There have been a multitude of studies examining the various dimensions and factors associated with eating disorders. This study examined personality traits, affective factors, and personality disorders associated with an overlooked population within the eating disordered literature. Previous studies have found specific personality and affective profiles related to eating disorder type. However, there are very few studies that examine these factors as they relate to individuals with intractable eating disorders. The more empirical data gathered about intractable eating disorders, greater is the likelihood of developing a treatment approach that is effective.

CHAPTER 3

METHODOLOGY

This chapter provides information on the sample size, description of the sample, data collection procedures, instrumentation, research design, and data analysis.

Sample Size

A statistical program G-Power (Version 2) (Faul & Erdfelder, 1992) was used to calculate an a priori power analysis and provide a subsequent sample size. A medium effect size (.5), significance criterion (.05), and a power ratio of .80 and .78 were used for the t-tests, and chi-square analyses. An alpha of .05 and standard error of .025 was used. With these criteria, 227 participants were needed for this study. Due to extreme difficulties accessing this vulnerable population, the number of participants involved in the study is much smaller than what was recommended.

Description of Sample

The sample consisted of 35 females obtained from various treatment settings that included eating disorder support groups, individual therapists, outpatient, inpatient, and partial hospitalization sites. The sample participants met the following inclusion criteria: (a) 18 years of age or older (b) currently have an eating disorder diagnosis (c) currently seeking treatment for an eating disorder (d) have had an eating disorder diagnosis for a minimum of 5 years. Intractability of the eating disorder was based on self-report and confirmation by a therapist.

Data Collection Procedures

Participants were recruited from a variety of treatment settings such as inpatient, outpatient, support groups, and individual therapists in private practice with clients who were diagnosed with eating disorders. The principal researcher initially contacted the clinical director of each eating disorder agency by telephone and then by letter (see Appendices A, B), to explain and request site participation in the study. After the facility agreed to participate it provided a letter of authorization that indicated its willingness to be a part of the study. Each site designated a trained onsite mental health professional to serve as the designated contact person and to identify potential participants within their facility who met the inclusion criteria. Once potential participants were identified the contact person or principal researcher requested participation in the study stressing that involvement was voluntary and participation or non-participation in no way affected treatment services.

At sites where the principal researcher had limited access to the potential participants (i.e., in-patient population units) the designated contact person followed the data collection instructions provided by the principal researcher in order to establish consistency in the procedures and administration of the research instrument. Data collection instructions focused on the research study procedures, instrumentation, and how to respond to questions that might arise during the course of data collection. The data collection instructions were in a handout and contained pertinent information that was disseminated and discussed with the designated contact person. Once the information was made available and understood by the designated contact person, that person met with potential participants on a group or individual basis, whichever was deemed most

efficient by the facility and/or contact person. Once the contact person met with the potential participant, an introduction and explanation of the research study was presented. Requests for voluntary participation followed by distribution of the consent letter (see Appendices C, D) was followed by distribution of the research packets as appropriate. In order to ensure anonymity, the participant was asked to read the directions of each instrument carefully and to follow the directions. The participant was instructed in the consent letter and verbally by the contact person to not identify oneself by name, address, telephone number or social security number on any instrument that was to be completed, in order to ensure anonymity. The participant was also instructed to answer all questions and not leave any responses blank. The contact person or principal researcher was available to answer any questions the participant had while completing the research packet. The completion of three questionnaires, as well as limited history and limited demographic information (i.e., age, sex, race, marital status, occupation) was requested. Completion of the entire research packet took approximately 40-60 minutes. Once the instruments in the research packet were completed, the individual was asked to seal the envelope and write the envelope's code letter and number over the envelope flap. The code letter and number were previously placed on the envelope for coding purposes and were located on the back of the envelope in bold black ink in the lower right corner. This code was established to further ensure anonymity. The contact person or principal researcher collected all completed research packets. If the contact person collected the research packets from the participants, the material was delivered in person or by certified mail to the principal researcher.

The research packet included an informed consent letter, explaining the study and its purpose, and the following instruments: (a) a Demographic/Treatment History Questionnaire (see Appendix E), (b) *Millon Clinical Multiaxial Inventory* (Version III), (c) *Eating Disorder Inventory* (Version 2), and (d) *Eating Disorder Symptom Checklist* (Version 2). If requested, the results were made available to the specific site locations. The data collection process took approximately three months.

Instrumentation

Demographic/Treatment History Questionnaire

A demographic/treatment history questionnaire was developed by the researcher. This questionnaire gathered information regarding the respondent's gender, age, ethnicity, level of education, employment status, and marital status. Questions regarding treatment history (including number of previous treatments), treatment setting, and duration of treatment, were used to gain retrospective and current data on the respondent's treatment history. The 11-item questionnaire sought information regarding the respondent's age at onset of the eating disorder; number of years between eating disorder onset and first eating disorder treatment; number of eating disorder treatments; length of treatment; success, partial success, or failure of treatment to resolve eating disorder symptoms; and eating disorder relapse(s) and duration. The questionnaire items were in a forced-choice and open-ended question format.

Millon Clinical Multiaxial Inventory-III (MCMI-III)

The *Millon Clinical Multiaxial Inventory-III* (Millon, Davis, & Millon, 1994) is a 175-item, forced-choice, true or false measure. Although the instrument is geared to an eighth-grade reading level and can be completed in 20 to 30 minutes, it should be used

only with adult populations. The structure of the *Millon Clinical Multiaxial Inventory-III* parallels the DSM-IV diagnostic categories and has 14 operationally-defined personality disorders. There are a total of 24 clinical scales of which the 14 personality disorders are a part. More long-standing personality disorders are distinguished from more acute situation-based characteristics and personality functioning. The score for each scale is derived from adding the weighted scores of all the responses from which the scale is comprised. The result is a raw score, which is then converted to a base rate score ranging from 0 to 115. From the base rate score a range can be derived that differentiates each scale based on level of severity. For the purposes of this study, four categorical levels were utilized with the following base rate numerical parameters: (a) non-clinical (0-34), (b) at-risk (35-74), (c) clinically significant (75-84), and (d) clinically severe (85-115).

Table 3-1 presents internal reliability information as measured by Cronbach's alpha of internal consistency (Millon, 1994), and test-retest reliability for each scale. The information obtained is based on a sample size of 398 but was not separated based on gender or age.

The Eating Disorders Inventory-2 (EDI-2)

The Eating Disorders Inventory-2 (EDI-2) (Garner, 1991) is a 91-item, self-report, paper-and-pencil measure used to assess cognitive, behavioral, and affective dimensions that can differentiate three subgroups of patients (normal, anorexia nervosa, bulimia nervosa). The inventory is composed of eight positively correlated subscales: (a) Drive for Thinness, (b) Bulimia, (c) Body Dissatisfaction, (d) Ineffectiveness, (e) Perfectionism, (f) Interpersonal Distrust, (g) Interoceptive Awareness, and (h) Maturity

Table 3-1

Length, Internal Consistency, and Test-Retest Reliability of the MCMI-III Scales

		Number Of Items	Internal Consistency (Cronbach's Alpha)	Test-Retest Reliability
Clinical Personality Patterns				
1A	Schizoid	16	.81	.89
2A	Aviodant	16	.89	.80
2B	Depressive	15	.89	.93
3	Dependent	16	.85	.89
4	Histrionic	17	.81	.91
5	Narcissistic	24	.67	.89
6A	Antisocial	17	.77	.93
6B	Sadistic (Aggressive)	20	.79	.88
7	Compulsive	17	.66	.92
8A	Negativistic (Passive Aggressive)	16	.83	.89
8B	Masochistic (Self-Defeating)	15	.87	.91
Severe Personality Pathology				
S	Schizotypal	16	.85	.87
C	Borderline	16	.85	.93
P	Paranoid	17	.84	.85
Clinical Syndromes				
A	Anxiety	14	.86	.84
H	Somatoform	12	.86	.96
N	Bipolar: Manic	13	.71	.93
D	Dysthymia	14	.88	.91
B	Alcohol Dependence	15	.82	.92
T	Drug Dependence	14	.83	.91
R	Post-Traumatic Stress Disorder	16	.89	.94
Severe Clinical Syndromes				
SS	Thought Disorder	17	.87	.92
CC	Major Depression	17	.90	.95
PP	Delusional Disorder	13	.79	.86
Modifying Indices				
X	Disclosure	NA	NA	.94
Y	Desirability	21	.86	.92
Z	Debasement	33	.95	.82

Cross-validation sample ($N=398$)Test-retest interval=5-14 days ($n=87$)

Fears. The first scale measures behaviors and attitudes toward eating, weight, and body shape; whereas, the other five subscales assess general psychological characteristics associated with eating disorders. There are also three provisional subscales comprised of 27 items: (a) Asceticism, (b) Impulse Regulation, and (c) Social Insecurity. These new subscales are considered provisional due to their relative newness to the instrument, smaller norming samples, and lower item-total correlations and will not be examined in this study. The EDI-2 has a fifth-grade reading level. Respondents rate their behaviors and beliefs on a forced 6 scale response with A=Always, U=Usually, O=Often, S=Sometimes, R=Rarely, N=Never. Item scores contribute to only one subscale score. Each EDI subscale is intended to measure a conceptually independent trait. Subscale scores are computed by summing all item scores for that particular subscale. Because each of the subscales provides a continuous score, the higher the subscale scores, the greater the manifestation of the trait. However, because the EDI-2 manual does not specify a categorical range of low, moderate, or high, neither will those categorical distinctions be used for the purposes of this study.

Validity for the EDI-2 has been established in several studies. The EDI-2 discriminated a clinical group of women with bulimia nervosa from control participants ($p < .05$ or $.01$ for all subscales; Gross, Rosen, Leitenberg, & Willmuth, 1986) and clients with anorexia nervosa from college females ($p < .001$ for all subscales; Garner, Olmsted, & Polivy, 1983). Acceptable internal consistency was reported by Eberly and Eberly (1985) both for the subscales and the measure as a whole.

Table 3-2 presents the internal reliability information as measured by Cronbach's alpha of internal consistency (Garner, 1991) and test-retest reliability for each scale. The information obtained is based on two separate samples.

Eating Disorder Inventory 2- Symptom Checklist

This instrument provides supplementary information regarding symptom duration and frequency of the following behaviors associated with eating disorders: (a) dieting, (b) exercise, (c) binge-eating, (d) purging, (e) laxative use, (f) diet pill use, (g) diuretic use, (h) menstrual history, and (i) current medications.

Research Design

The study employs a passive research design. This design is widely used in social science research. The benefits of utilizing this research design are that participants are taken directly from the population of interest, and there is no manipulation involved. This usually results in good external validity. Another benefit is in the use of self-report instruments. Although some limitations exist with this method, there are advantages (Garner, 1991). The literature indicates that self-report measures are standardized, economical, require little time to complete, and decrease the influence of interviewer-responder expectancy effects. In using self-report measures, the researcher can assess phenomena that are typically difficult to measure due to respondents feeling more comfortable and less inhibited disclosing behaviors that they may consider embarrassing or shameful (Garner, 1991).

Due to the lack of randomization and manipulation of the independent variables, this design has low internal validity. Although self-report measures

Table 3-2

Internal Consistency Reliability Estimates for Eating Disorder Samples

EDI Subscale	Internal Consistency Cronbach's Alpha	Test-Retest Reliability
Drive for Thinness	.83	.92
Bulimia	.86	.90
Body Dissatisfaction	.92	.97
Ineffectiveness	.90	.85
Perfectionism	.80	.88
Interpersonal Distrust	.84	.81
Interoceptive Awareness	.83	.85
Maturity Fears	.83	.65
Cross validation sample ($N=889$)		
Test-retest interval = 3 weeks ($n=70$)		

decrease the interviewer-respondent expectancy effects, a potential threat remains to the construct validity of putative cause and effect due to the strong likelihood of evaluation apprehension. This threat is due to participants responding in such a way as to make themselves appear healthier than they are. There is also a threat to external validity due to the lack of generalizability across settings and persons.

Data Analyses

The Statistical Package for the Social Sciences Graduate Pack 11.0 for Windows (SPSS) was used to analyze the data for this study. Descriptive statistics (i.e., means, standard deviations) were derived to examine the demographic information of the participants. Specific demographic variables that were examined included the following: age, gender, ethnicity, educational status, and marital status.

Research Question 1

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa have different personality functioning?

Null Hypothesis:

1. There are no statistically significant differences in personality functioning as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994) for women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Statistical Analysis:

T-tests are used to compare mean differences of personality disorders, as measured by the *Millon Clinical Multiaxial Inventory-III* between women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Research Question 2

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa have personality disorders that differ in level of severity?

Null Hypothesis:

1. There are no statistically significant differences in the level of severity of personality disorders as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994) between women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Statistical Analysis:

A chi-square analysis is used to compare differences in range of scores categorized by levels of severity, as measured by the *Millon Clinical Multiaxial Inventory-III* between women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Research Question 3

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa differ with respect to affective states?

Null Hypothesis:

1. There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to level of anxiety as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994).
2. There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with

respect to depression as measured by the *Millon Clinical Multiaxial Inventory-III*.

3. There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to interoceptive awareness as measured by the *Eating Disorder Inventory-2* (Garner, 1991).

Statistical Analysis:

T-tests are used to compare mean differences in affective states (i.e., anxiety, depression, interoceptive awareness) as measured by the *Millon Clinical Multiaxial Inventory-III* and *Eating Disorder Inventory-2* (EDI-2) between women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Research Question 4

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa differ with respect to personality traits?

Null Hypothesis:

1. There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to ineffectiveness as measured by the *Eating Disorder Inventory-2* (Garner, 1991).
2. There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with

respect to perfectionism as measured by the *Eating Disorder Inventory-2* (Garner, 1991).

Statistical Analysis:

T-tests are used to compare mean differences in personality traits (i.e., ineffectiveness, perfectionism) as measured by the *Eating Disorder Inventory-2* between women with intractable anorexia nervosa and women with intractable bulimia nervosa.

CHAPTER 4

RESULTS

The present study was designed to examine personality and affective dimensions associated with women who suffer from intractable anorexia nervosa and intractable bulimia nervosa. The present chapter reports the results of the statistical analyses of the data obtained from this sample.

Demographic Data

Data from 35 women were obtained from various treatment settings that included eating disorder support groups, individual therapists, outpatient, inpatient, and partial hospitalization sites. The participants met the following inclusion criteria: (a) 18 years of age or older (b) currently have an eating disorder diagnosis (c) currently seeking treatment for an eating disorder (d) have had an eating disorder diagnosis for a minimum of 5 years. Categorizing the eating disorder as intractable was based on self-reported behaviors, history, and confirmation by a therapist. Assignment to anorexia nervosa or bulimia nervosa groups was based on reported eating disordered behaviors, cognitions, and diagnosis.

Most of the participants (98%) classified their race/ethnicity as White, while (2%) identified as Asian American. The participants who responded ranged in age from 19 to 44. The majority of respondents reported that they were from inpatient treatment facilities (41%). More than half of the participants (59%) were classified as having symptoms that

most closely resembled anorexia nervosa. Demographic characteristics of the total sample can be found in Table 4-1.

Statistical Considerations

The small sample size for this study necessitated some changes in the type of statistical analyses used. The original analyses that were to be used in this study were the t-test and chi-square test. Use of a t-test is based on the following three population assumptions: (a) independence, (b) normalcy, and (c) homogeneity of variance. However, because the sample size is small there is a strong probability that assumptions of population normalcy and homogeneity of variance would be compromised. As a result, nonparametric independent t-tests were used. This test makes no assumptions regarding homogeneity of variance since it is based on raw data ranking. The chi-square statistic is not influenced by sample size; therefore, the use of this analysis remains appropriate for use in this study.

Another limitation of a small sample size when analyzing data is an increased risk of accepting the null hypothesis when it should be rejected. This increased probability indicates some limitations in the power of this study.

It should also be noted that three women did not fully complete all measurements contained within the research packet. Where appropriate analyses reflect the difference in sample size.

Findings

The following four research questions and null hypotheses were examined in this study. For each question and null hypothesis, the results of the statistical analysis are reported.

Table 4-1

Demographic Characteristics of Total Sample

Variable	<i>n</i>	P
Site Location		
Inpatient	15	41
Outpatient	13	38
Support Group	7	21
Age		
19-21	7	22
22-25	6	18
26-29	5	16
30-33	4	12
34-37	5	16
38 and over	5	16
Missing	3	-
Ethnicity		
White	34	98
Asian-American	01	02

Note. *N* = 35

Research Question 1

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa have different personality functioning?

Null Hypothesis: There are no statistically significant differences in personality functioning as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994) for women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Non-parametric independent t-tests were used to investigate the mean differences in personality functioning as measured by the *Millon Clinical Multiaxial Inventory-III* between women with intractable anorexia nervosa and women with intractable bulimia nervosa. The means and standard deviations for each MCMI-III personality scale are presented in Table 4-2 as a function of eating disorder diagnostic type. There were no statistically significant differences in means between women with intractable anorexia nervosa and intractable bulimia nervosa with respect to scores on the Schizoid, Avoidant, Depressive, Dependent, Histrionic, Narcissistic, Negativistic, Masochistic, Schizotypal, Borderline, and Paranoid scales. However, there were statistically significant differences between group means on the Antisocial, Sadistic, and Compulsive personality functioning scales. Compared to women with intractable anorexia nervosa, those with intractable bulimia nervosa had statistically significant higher mean scores on the Antisocial (M=65, SD=24) and Sadistic (M=68, SD=20) scales. Meanwhile, those with intractable anorexia nervosa had higher mean scores on the Compulsive scale (M=56, SD=20). Based on these findings, the null hypothesis for Research Question 1 was rejected.

Table 4-2

*Means, Standard Deviations, Mann-Whitney U Test, and 2-Tail Significance for
Personality Scales of the Millon Clinical Multiaxial Inventory-III*

MCMI-III Scale	Intractable Anorexia (n=20)		Intractable Bulimia (n=12)		Mann* Whitney U	
	M	SD	M	SD	t	p
Schizoid	67.45	22.57	56.08	27.09	-1.37	.171
Avoidant	76.55	30.81	73.75	36.85	.92	.922
Depressive	86.80	31.98	88.33	28.46	-.07	.937
Dependent	77.05	26.11	84.17	28.38	-1.20	.227
Histrionic	38.80	26.04	55.33	28.10	-1.65	.097
Narcissistic	42.60	26.84	60.50	20.99	-1.95	.051
Antisocial	42.15	23.83	65.75	24.22	-2.57	.010**
Sadistic	54.85	19.92	68.00	20.00	-2.44	.051**
Compulsive	56.20	20.54	40.58	19.10	-2.10	.035**
Negativistic	59.05	23.08	72.91	20.46	-1.77	.075
Masochistic	86.25	25.66	85.08	29.23	-.41	.682
Schizotypal	62.10	23.36	69.75	17.97	-.68	.494
Borderline	67.90	23.94	76.66	28.47	-.97	.330
Paranoid	61.90	22.49	60.83	27.59	-.33	.740

Note: N=32

*Non-Parametric t-test

**2-tail $p < .05$

Research Question 2

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa have personality disorders that differ in level of severity?

Null Hypothesis 1: There are no statistically significant differences in the level of severity of personality disorders as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994) among women with intractable anorexia nervosa and women with intractable bulimia nervosa.

A chi-square analysis was used to compare differences in range of scores categorized by levels of severity, as measured by the *Millon Clinical Multiaxial Inventory-III*, among women with intractable anorexia nervosa and women with intractable bulimia nervosa. Of the 14 personality scales, only one was found to be statistically significant when comparing differences in scores based on categorical levels. Significant differences in levels of severity were indicated between the two groups on the Antisocial scale. Results indicated that a larger number of women with intractable bulimia nervosa were found to have scored in the clinically severe range on the Antisocial scale ($X = 12.75, p = .005$), in comparison to women with intractable anorexia nervosa. Based on these findings, the null hypothesis was rejected for Research Question 2. Additional information can be found in Table 4-3.

Table 4-3

Percentages and Frequencies of Subjects Scoring in Clinically Significant Ranges on the Millon Clinical Multiaxial Inventory-III

MCMI-III Scale	Intractable Anorexia Nervosa (<i>n</i> =20)		Intractable Bulimia Nervosa (<i>n</i> =12)	
	Range A	Range B	Range A	Range B
	P	P	P	P
Schizoid	20	25	00	16
Avoidant	00	60	08	41
Depressive	10	65	00	67
Dependent	25	50	25	58
Histrionic	50	05	50	25
Narcissistic	00	15	08	08
Antisocial	05	00	42	17
Sadistic	00	05	17	25
Compulsive	15	05	00	00
Negativistic	20	05	17	33
Masochistic	10	75	00	75
Schizotypal	10	15	00	33
Borderline	45	15	17	50
Paranoid	10	10	41	08

Note: A = Scale Scores of 75-84; Clinically Significant

B = Scale Scores of 85-114; Clinically Severe

**p* < .05

Research Question 3

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa differ with respect to affective states?

Null Hypothesis 1: There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to level of anxiety as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994).

Non-parametric independent t-tests were used to investigate the mean differences in anxiety level, as measured by the *Millon Clinical Multiaxial Inventory-III*, between women with intractable anorexia nervosa and women with intractable bulimia nervosa. Results indicated no statistically significant differences in means between women with intractable anorexia nervosa ($M=82$, $SD=20$) and women with intractable bulimia nervosa ($M=78$, $SD=31$) with respect to scores on the Anxiety scale. While there may not have been any statistically significant differences, women with intractable anorexia nervosa and women with intractable bulimia nervosa evidenced clinically elevated levels of anxiety. Based on these results, Null Hypothesis 1 for Research Question 3 is accepted.

Null Hypothesis 2: There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to level of depression as measured by the *Millon Clinical Multiaxial Inventory-III* (Millon, 1994).

Non-parametric independent t-tests were used to investigate the mean differences in level of depression, as measured by the *Millon Clinical Multiaxial Inventory-III*,

between women with intractable anorexia nervosa and women with intractable bulimia nervosa. Results indicated no statistically significant differences in means between women with intractable anorexia nervosa ($M=68$, $SD=31$) and women with intractable bulimia nervosa ($M=60$, $SD=30$) with respect to scores on the Major Depression scale. Based on these results, Null Hypothesis 2 of Research Question 3 is accepted.

Null Hypothesis 3: There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to interoceptive awareness as measured by the *Eating Disorder Inventory-2* (Garner, 1991).

Non-parametric independent t-tests were used to investigate the mean differences in levels of interoceptive awareness, as measured by the *Eating Disorder Inventory-2*, between women with intractable anorexia nervosa and women with intractable bulimia nervosa. Results indicated no statistically significant differences in means between women with intractable anorexia nervosa ($M=12$, $SD=7.2$) and women with intractable bulimia nervosa ($M=13$, $SD=6.5$) with respect to interoceptive awareness. While there may not have been any statistically significant differences in mean scores, both women with intractable anorexia nervosa and women with intractable bulimia nervosa had high mean scores that indicated clinically significant levels of interoceptive awareness, suggesting an inability to appropriately respond to emotional states in life functioning. Based on these results, Null Hypothesis 3 of Research Question 3 is accepted. The means and standard deviations for scores on the anxiety, depression, and interoceptive awareness personality scales are presented in Table 4-4 as a function of eating disorder diagnostic type.

Table 4-4

Means, Standard Deviations, Mann-Whitney U Tests, and 2-Tail Significance for Affective Personality Scales of the Millon Clinical Multiaxial Inventory-III and the Eating Disorder Inventory-2

	Intractable Anorexia (n=20)		Intractable Bulimia (n=12)		Mann* Whitney U		
	M	SD	M	SD	t	<i>p</i>	
MCMI-III Scale							
Anxiety		82	20	78	27	-.176	.860
Major Depression	68	31	60	31		-.507	.612
EDI-2 Scale							
Interoceptive Awareness	12	7.2	13	6.5		-.613	.540

Note: n=32

Research Question 4

Do women with intractable anorexia nervosa and women with intractable bulimia nervosa differ with respect to personality traits?

Null Hypothesis 1: There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to ineffectiveness as measured by the *Eating Disorder Inventory-2* (Garner, 1991).

Non-parametric independent t-tests were used to investigate the mean differences with respect to ineffectiveness, as measured by the *Eating Disorder Inventory-2*, between women with intractable anorexia nervosa and women with intractable bulimia nervosa. There were no statistically significant differences in means between women with intractable anorexia nervosa ($M=13$, $SD=9$) and women with intractable bulimia nervosa ($M=11$, $SD=5$) with respect to ineffectiveness. While there may not have been any statistically significant differences in mean scores, both women with intractable anorexia nervosa and women with intractable bulimia nervosa had high mean scores that indicated clinically significant levels of ineffectiveness, suggesting an overall sense of inadequacy in life functioning. Based on these results, Null Hypothesis 1 of Research Question 4 is accepted.

Null Hypothesis 2: There are no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa with respect to perfectionism as measured by the *Eating Disorder Inventory-2* (Garner, 1991).

Non-parametric independent t-tests were used to investigate the mean differences with respect to perfectionism, as measured by the *Eating Disorder Inventory-2*, between women with intractable anorexia nervosa and women with intractable bulimia nervosa. There were no statistically significant differences in means between women with intractable anorexia nervosa ($M=10$, $SD=6$) and women with intractable bulimia nervosa ($M=11$, $SD=5$) with respect to ineffectiveness. While there may not have been any statistically significant differences in mean scores, both women with intractable anorexia nervosa and women with intractable bulimia nervosa had high mean scores. Clinically significant levels of perfectionism suggest the belief that only the highest standards of personal functioning are acceptable. Based on these results, Null Hypothesis 2 of Research Question 4 is accepted. The means and standard deviations for scores on the ineffectiveness and perfectionism personality scales are presented in Table 4-5 as a function of eating disorder diagnostic type.

Table 4-5

*Means, Standard Deviations, Mann-Whitney U T-Tests, and 2-Tail Significance for
Personality Trait Subscales of the Eating Disorder Inventory-2*

	Intractable Anorexia (<i>n</i> =20)		Intractable Bulimia (<i>n</i> =12)		Mann* Whitney U	
	M	SD	M	SD	t	<i>p</i>
EDI-2 Scale						
Ineffectiveness	13	9	11	5	-.474	.636
Perfectionism	10	6	11	5	-1.421	.155

Note: *n*=32

Table 4-6

Summary of Findings for the Research Questions and Null Hypotheses

<i>Research Questions</i>	<i>Findings</i>
1. Null Hypothesis 1	Rejected
2. Null Hypothesis 1	Rejected
3. Null Hypothesis 1	Accepted
Null Hypothesis 2	Accepted
Null Hypothesis 3	Accepted
4. Null Hypothesis 1	Accepted
Null Hypothesis 2	Accepted

CHAPTER 5

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

The following chapter provides a discussion of the study's results, implications of the findings, and recommendations for future research.

Discussion

The number of individuals reporting eating disordered thoughts and behaviors increases daily, and research indicates significant increases in both anorexia nervosa and bulimia nervosa in the past 10 years (Garner & Garfinkel, 1997). Some individuals suffering from anorexia nervosa or bulimia nervosa recover fully after a single episode, some exhibit fluctuating patterns of recovery periods followed by relapses, and others experience a chronically deteriorating course of the illness over many years (Dennis & Sansone, 1997). Although there is a growing body of eating disorder literature examining the comorbidity of personality disorders, traits, and affective features, little information exists examining how these variables relate to persons with intractable eating disorders. The purpose of this study was to examine personality and affective dimensions associated with women who suffer from intractable eating disorders. Specifically, this study investigated personality disorders, anxiety, depression, interoceptive awareness, ineffectiveness, and perfectionism in women with intractable anorexia nervosa and intractable bulimia nervosa.

The research questions which guided this study were: (a) Are there differences in personality functioning among women with intractable anorexia nervosa and women with

intractable bulimia nervosa?, (b) Are there differences in the level of severity of personality disorders among women with intractable anorexia nervosa and women with intractable bulimia nervosa?, (c) Are there differences in affective states among women with intractable anorexia nervosa and women with intractable bulimia nervosa?, and (d) Are there differences in personality traits among women with intractable anorexia nervosa and women with intractable bulimia nervosa?

There were 35 female research participants. Twenty women were diagnosed with intractable anorexia nervosa and 12 women were identified with intractable bulimia nervosa. In the sample 98% identified themselves as White, while 2% classified themselves as Asian American. Their ages ranged from 19 to 44. Participants were obtained from support groups, inpatient, and outpatient treatment facilities, and individual therapists in private practice who served clients with eating disorders. The length of time with a diagnosed eating disorder ranged from 5 to 22 years. Nonparametric independent t-tests, chi-square, and descriptive statistics were used to investigate the research questions for this study.

Specific patterns of personality disorders have been found when examining individuals with anorexia nervosa and individuals with bulimia nervosa. Investigations indicate a prevalence of obsessive-compulsive personality disorder among women with anorexia nervosa, and borderline and histrionic personality disorders among women with bulimia nervosa. A few studies indicate avoidant and dependent personality functioning as equally likely across eating disorder types (Johnson & Wonderlich, 1992; Wideman & Pryor, 1997). These findings indicate that anorexics and bulimics differ with regard to certain personality functioning.

In the current study, statistically significant differences were found in personality functioning between women with intractable anorexia nervosa and women with intractable bulimia nervosa. Women with intractable anorexia nervosa were found to have higher scores on the Compulsive personality disorder functioning scale, which correlates with the DSM-IV Obsessive-Compulsive personality disorder. Women with intractable bulimia nervosa were found to have higher scores on the Antisocial and Sadistic scales, which correlate with the DSM-IV Antisocial personality disorder category. The Sadistic scale could be considered a measure of antisocial features or traits, indicating less pathology. These findings suggest that there are specific differences in personality functioning in the areas of compulsive, antisocial, and sadistic behaviors, emotions, and cognitions between the two groups of women with intractable eating disorders.

The personality functioning of individuals with high scores on the Compulsive scale tend to be prudent, controlled, and perfectionistic. These individuals possess an excessive devotion to work and devalue pleasurable or recreational activities. Their worth is defined by culturally defined productivity (i.e., career, prestige, wealth). According to Millon (1994), the personality functioning of these individuals is derived from a conflict between hostility toward others and fear of social disapproval. This ambivalence is resolved by suppressing their resentment and by overconforming and placing high demands on themselves and others. Their disciplined self-restraint serves to control intense feelings, resulting in an overt passivity and seeming public compliance. Behind this front of propriety and restraint, however, are intense anger and oppositional feelings

that occasionally break through their controls. Their interpersonal relationships tend to lack warmth and empathy.

For individuals who suffer from anorexia nervosa and whose personality functioning is obsessive-compulsive, the eating disorder may serve an adaptive role. Engaging in eating disordered behavior allows the individual an opportunity to rebel and act out her constrained oppositional feelings, while simultaneously justifying the behavior by defining the context as that of achievement (i.e., weight loss, thinness). The eating disorder may also meet the individual's need to be able to predict and control her world through focusing on numbers, measurements, regulations, and rules that are fixed. It may also serve the purpose of allowing the individual to withdraw from the demands of adolescence and young adulthood. The eating disorder effectively isolates the individual from others due to an adherence to excessively rigid behaviors and the belief that authentic relationships with others could interfere with her well-organized and predictable world. The adaptive role that the eating disorder serves also acts as a maintaining force in the persistence of the disorder.

In this study, the Compulsive scale mean score for women with intractable anorexia nervosa differed significantly from that of women with intractable bulimia nervosa. Although the scale score was not in the personality disorder range women with intractable anorexia nervosa were more likely to demonstrate behaviors associated with obsessive-compulsive disorder when compared to women with intractable bulimia nervosa. The behavioral, emotional, and cognitive expression of this personality feature or trait indicates less pathology than with individuals who possess an obsessive-compulsive personality disorder.

The personality functioning of individuals with high scores on the Antisocial and Sadistic scales highlights the manner in which an individual copes and relates to others. Individuals with high scores on the Antisocial scale reflect an orientation of skepticism concerning the motives of others. They tend to be irresponsible and impulsive, qualities they believe are justified because they judge others to be unreliable and disloyal. According to their view, insensitivity and ruthlessness are the only means of avoiding abuse and victimization at the hand of others. High scorers on the Sadistic scale account for those individuals who may not score in the clinical range on the Antisocial scale but get some personal satisfaction or pleasure in ways that humiliate and violate the rights and feelings of others. They may also display character styles similar to the competitively striving Type A personality. Others may also perceive these individuals as aggressive personalities who are often hostile and pervasively combative, and appear to be indifferent to or even pleased by the destructive consequences of their contentious, and abusive behaviors. Many, however, cloak their malicious and power-oriented tendencies in publicly approved roles and vocations.

Antisocial and aggressive personality functioning is uncommon in patients with eating disorders. However, some eating disorder patients, particularly those diagnosed with borderline personality disorder, may display prominent antisocial features (Dennis & Sassone, 1997). In this study, while the Antisocial and Sadistic scale scores of women with intractable bulimia nervosa indicated a statistically significant difference from women with intractable anorexia nervosa, neither scale score was in the personality disorder range. Women with intractable bulimia nervosa exhibited some features and traits characteristic of the disorder, but less severe than would be found with an

individual who suffered from the personality disorder. The significance of the Antisocial scale in this study may be explained by the presence of a clinically significant elevation in the Borderline scale that was in the personality disorder range. The association of these two scales has been supported in the eating disorder literature (Dennis & Sassone, 1997).

Although no statistical significance was found, it is interesting to note that in this study both eating disorder diagnostic groups had relatively high scores on the Avoidant, Dependent, Depressive, and Masochistic scales indicating clinically significant maladaptive personality functioning in these areas. However, women with intractable anorexia nervosa scored higher on the Avoidant and Masochistic scales when compared to women with intractable bulimia nervosa. Women with intractable bulimia nervosa tended to have more elevated scores on the Depressive and Dependent scales.

Much has been written on the supposed distinctions in personality functioning between women with anorexia nervosa and those with bulimia nervosa (Pryor, Wiederman, & McGilley, 1996). However, the results of this study are contrary to much of the information with regard to the shared clinically significant scale scores (i.e., Avoidant, Dependent, Masochistic, Depressive).

An explanation of these findings takes into account the length of time a person may have had a diagnosable eating disorder and the range of eating disorder behaviors displayed as a result. Although there is not a great deal of empirical research regarding this phenomenon, it is widely seen in clinical work. The more intractable an eating disorder the greater the likelihood that over time the eating disorder behaviors have vacillated between restricting (anorexic) and purging (bulimic), thereby influencing personality functioning.

This explanation has implications regarding the diagnostic categories of eating disorders found in this study and supports researchers who advocate consideration of eating disorders as existing on a continuum of severity, possibly with caloric restriction (exclusively restricting anorexics) at one end and increasingly severe bulimic behavior on the other end.

Findings of this study suggest that women with intractable eating disorders share elevations in certain personality functioning (i.e., Avoidant, Dependent, Masochistic, Depressive), which appears to contradict previous studies. An alternate explanation is that the persistence of the eating disorder supercedes the eating disorder diagnostic type, possibly indicating that there is shared personality functioning that is due to the intractability of the eating disorder.

There are considerable treatment implications as a result of these findings. Namely, that in order to begin effectively treating women with intractable eating disorders, personality disorders and maladaptive personality functioning must be integrated into what has primarily become a cognitive-behavioral model of treatment.

It is unclear whether affective disturbances contribute to or occur as a result of the onset of an eating disturbance; however, both anxiety and depression are associated with individuals with eating disorders. Some studies indicate that anxiety is present at a higher rate in anorexic populations; whereas, depression is more prevalent among individuals with bulimia (Podar, Hannus, & Allik, 1999). Empirical research indicates that for individuals with both types of eating disorders there is an extreme avoidance of negative emotions and an inability to identify, tolerate, regulate, or process emotional experiences. These combined factors of emotional avoidance and emotional

dysregulation are identified in some of the literature as interoceptive awareness (Garner, 1991).

In this study, no statistical differences were found for anxiety, depression, and interoceptive awareness. The results did suggest that women with intractable anorexia nervosa were more likely, on average, to score higher on the Anxiety subscale than bulimics. This finding was in agreement with a number of empirical studies. Women with intractable anorexia nervosa were also found to, on average, have higher scores for major depression. This finding was inconsistent with previous findings that suggest women with bulimia nervosa have greater mood disturbance due to their high impulsivity, affective lability, and difficulty regulating emotions. One possible explanation for this result is that the scores on the Depression subscale may be artificially suppressed due to the high number (82%) of participants being treated pharmacologically with antidepressants. Regarding the affective trait of interoceptive awareness, statistical significance was not established; however, both groups of women scored within the range common for women with eating disorders. Not surprisingly, on average, the scores of women with intractable eating disorders suggest a greater degree of difficulty expressing thoughts and feelings deemed negative or in conflict with others.

Personality traits have also been proposed as critical in the development and maintenance of eating disorders. Although by no means absolute, some researchers have suggested that perfectionism is a greater psychological need within the anorexia nervosa population as compared to the bulimia nervosa population (Geller, Cockell, & Goldner, 2000). Results of some studies (Cockell et.al., 1997; Goldner, Birmingham, & Smye, 1997) indicated the presence of perfectionism as a personality trait, a need to be perfect,

and the simultaneous need to appear perfect to others. To admit to personal imperfections or character flaws was unacceptable. The findings of this study indicated no statistically significant differences on the Perfectionism scale among women with intractable anorexia nervosa and women with intractable bulimia nervosa. The personality trait of ineffectiveness also indicated no statistically significant differences between women with intractable anorexia nervosa and women with intractable bulimia nervosa. These findings should be interpreted with caution due to the small sample size. However, the results may indicate that the *Eating Disorder Inventory-2* may not adequately distinguish the traits of perfectionism or ineffectiveness between intractable anorexic and bulimic populations. Another possible explanation is that perfectionism may indeed be a shared personality trait with no specific characteristics that are found more or less between women with intractable anorexia nervosa and women with intractable bulimia nervosa.

Implications

As the number of women suffering from eating disorders increases, it is reasonable to assume that the number of individuals suffering from intractable eating disorders will also rise. In order to develop more effective treatment for this subset of the eating disordered population, the chasm between clinical observation and empirical findings must be closed. The use of more appropriate measurements of personality functioning that provide rich clinical information supports the wider use of the MCMI-III. More extensive use of this instrument, empirically and clinically, is essential in further illuminating personality complexities of eating disorders and would assist in better meeting the needs women with intractable eating disorders. Furthermore, findings from this study suggest that the widely used and empirically supported cognitive-

behavioral approach to treating eating disorders is insufficient when encountering women with intractable eating disorders. The impaired personality functioning, as indicated by the results of this study, strongly suggests that a therapeutic approach integrating a cognitive-behavioral approach with an orientation that also addresses improving pathological personality functioning may better meet the therapeutic needs of this subgroup. An examination of therapeutic approaches that address personality functioning (e.g., a psychodynamic and interpersonal model of therapy) used in conjunction with the more traditional cognitive behavioral approach in treating women with intractable eating disorders could have powerful clinical impact. Furthermore, a greater understanding of factors and characteristics that influence the development and maintenance of intractable eating disorders is essential. Beyond the scope of this study but worthy of further investigation is how family of origin dynamics influence the development of certain pathological and maladaptive personality functioning and more importantly how family and interpersonal dynamics may play a role in maintaining the eating disorder behaviors.

Limitations

1. Having a small sample size resulted in cautious interpretations of the data.

Until researchers can access larger numbers of individuals with eating disorders, all conclusions will remain cautious, resulting in limited generalizability.

2. The variation of treatment settings may have resulted in a greater variance in scores. The type of treatment setting may possibly reflect variation in severity and pathology, where the more severely disturbed participants were treated in an environment with greater treatment intensity (i.e., inpatient).

Research Recommendations

1. The current study only examined participants in support groups, inpatient, and outpatient facilities, and individuals receiving individual therapy. A similar study involving a random sample, a non-intractable group, and a control group would be useful in discerning whether the pattern of subscale associations found in this study are unique only to the subset of women with intractable eating disorders or if they are shared across the entire eating disorder population.
2. The current study did not control for sociological variables such as age, class, social factors, or cultural factors (i.e., immigrant vs. 2nd generation immigrant status).
3. Eating disorders continue to be considered a middle-class, female, primarily Caucasian disorder. However, the phenomenon needs to be examined in relation to cross-cultural variables (i.e., gender, race/ethnicity, immigration status, socioeconomic status, acculturation vs. assimilation perspectives).
4. A longitudinal study of the state/trait aspects of personality disorders, personality traits, and affective traits would be very beneficial in assisting researchers to determine what conditions pre-date the eating disorder and what conditions are created in response to the eating disorder.
5. More studies examining eating disorder populations utilizing the MCMI-III are needed due to the instrument being more appropriate for populations exhibiting pathology.

Conclusions

This exploratory study examined personality and affective dimensions associated with women who suffer from intractable anorexia nervosa and intractable bulimia nervosa. Specifically, this study investigated personality disorders, anxiety and depression states, interoceptive awareness, and the personality traits of ineffectiveness and perfectionism. While many studies investigating eating disorders have included personality and affective dimensions, few have studied them in tandem with intractability of an eating disorder. This research indicates the importance of personality disorders as a comorbid factor for women with intractable anorexia nervosa and women with intractable bulimia nervosa. Of particular importance is the identification and the application of an appropriate therapeutic treatment approach to personality disorders in conjunction with the more widely accepted cognitive-behavioral therapeutic treatment approach presently used.

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APPENDIX A
SITE PARTICIPATION COVER LETTER

Dear Dr. XXXXX

My name is Lisa K. Ellis, M.Ed. and I would like to invite you to participate in a research project that is currently in progress. I am a doctoral student completing my dissertation at the University of Georgia, Department of Counseling and Human Development Services. I am also currently employed as a therapist at an intensive outpatient facility where the clientele are primarily women with eating disorders. My three years of clinical observation is how my research interest developed in an overlooked subgroup of individuals with eating disorders, namely individuals with intractable eating disorders. Persons with intractable eating disorders are rarely the focus of empirical studies and are referenced infrequently in the literature.

The purpose of this letter is to request your involvement in this research as a site from which to access this population as potential research participants. I am specifically interested in individuals who have an eating disorder, are currently in treatment, and have had their eating disorder for five years or more. My aim in conducting this research is to gather information regarding personality disorders, affective states, and personality traits among women with intractable eating disorders. Investigation of personality and affective dimensions will assist in providing empirical data with treatment implications for those individuals who do not fully respond to treatment and whose eating disorder is intractable.

I request permission to do research with inpatient, partial, and residential clients who meet the inclusion criteria for the study. I have spoken and corresponded with Dr. XXX previously and she has verbalized an interest in assisting me with my research. At this time I would like to make a formal request through the Human Subjects Committee for permission to conduct research, utilizing clients from your treatment facility. For your information I have attached a number of documents that will provide more detailed information regarding the research study and that will answer any questions you might have. The following attachments, including what you are presently reading, are (1) a formal site participation that outlines the major aspects of the study (2) an informed consent that provides the same general information for potential research participants and (3) a copy of directions to participants and instruments to be completed in each research packet.

All research sites that participate in this study can request overall findings from the study. If you do agree to site participation in this study, a statement on business letterhead with your signature and date, indicating your agreement will be required. A designated research assistant will be established for your site. This individual will gather information, distribute, and collect research packets from the identified participants. Completion of the research packet will require a time commitment of approximately 40-60 minutes by the research participant. The information provided by the participants will be anonymous.

All women who participate in this research study can request overall findings from the study. Please consider taking the time to assist me in completing research in this much needed area. Your input, providing potential clients, and any referrals you might be able to provide will assist in leading to greater professional awareness, understanding, and treatment implications for women with intractable eating disorders.

If you have any questions or wish to discuss my research with me further please feel free to contact me by e-mail at lellis12@prodigy.net or at (404) 421-0125.

Thank you very much for your consideration.

Sincerely,

Lisa K. Ellis, M.Ed.
Ph.D. Candidate

APPENDIX B
SITE PARTICIPATION LETTER

Dear Dr. XXXX,

My name is Lisa K. Ellis, M.Ed. and I would like to invite you and your colleagues at XXXXX to participate in a research project that is currently in progress entitled "An Examination of Personality and Affective Dimensions in Women with Intractable Eating Disorder". I am a doctoral student completing my dissertation at the University of Georgia, Department of Counseling and Human Development Services, under the supervision of Dr. Rosemary Phelps. I am also currently employed as a therapist at the Eating Disorders Recovery Center of Athens, where Dr. Ann Weitzmann-Swain is the Clinical Director. My three years of clinical observation, while employed by the EDRCA, developed my research interest in an overlooked subgroup of individuals with eating disorders, namely individuals with intractable eating disorders. This population often requires multiple treatment periods, has great difficulty maintaining periods of recovery, and are challenging clients, with whom to work. This population is rarely the focus of empirical studies and is referenced infrequently in the literature.

The purpose of this letter is to request your involvement in the study as a site from which to access this difficult to reach population. Your facility is unique in that it offers therapeutic treatment, by a number of different professionals who have a great deal of experience treating this population. The inclusion criteria for this study are individuals who have an eating disorder, (i.e., anorexia nervosa, bulimia nervosa, or eating disorder not otherwise specified with anorexic or bulimic features), are currently in treatment-at any point in the recovery process, and have had their eating disorder for five years or more. My goal in conducting this research is to gather information regarding personality disorders, affective states, and personality traits among women with intractable eating disorders. Investigation of personality and affective dimensions will assist in providing empirical data with treatment implications for those individuals who do not fully respond to treatment and whose eating disorder is intractable.

For your information I have attached a number of documents that will provide more detailed information regarding the research study and that will answer any questions you might have. The following attachments, including what you are presently reading, are (1) a formal site participation letter that outlines the major aspects of the study (2) an informed consent that provides the same general information for potential research participants and (3) a copy of directions to participants and instruments to be completed in each research packet.

All research sites that participate in this study can request overall findings from the study. If you do agree to site participation in this study, a statement on business letterhead with your signature and date, indicating your agreement will be required. A designated research assistant will be established for your site. This individual will gather information, distribute, and collect research packets from the identified participants. Completion of the research packet will require a time commitment of approximately 40-60 minutes by the research participant. The information provided by the participants will be anonymous.

All women who participate in this research study can request overall findings from the study. Your input, identification of potential participants, and any referrals you might be able to provide will assist in leading to greater professional awareness, understanding, and treatment implications for women with chronic eating disorders.

If you have any questions or wish to discuss my research with me further please feel free to contact me by e-mail at lellis12@prodigy.net or at (404) 421-0125. Thank you very much for your consideration,

Sincerely,

Lisa K. Ellis, M.Ed.
Ph.D. Candidate

Research at The University of Georgia which involves human participants is carried out under the oversight of the Institutional Review Board. Questions or problems regarding these activities should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706)542-3199; E-Mail Address IRB@uga.edu.

APPENDIX C
CONSENT LETTER

Dear Participant:

I am engaging in research that examines aspects of personality and emotions in women with eating disorders. The study is entitled "An Examination of Personality and Affective Dimensions in Women with Intractable Eating Disorders" and is being conducted by Lisa K. Ellis, M.Ed., under the supervision of Dr. Rosemary Phelps, Department of Counseling and Human Development Services, whose telephone number is (706) 542-1812. You are being asked to participate in this research to help the mental health profession in developing a better understanding of some of the factors involved with women who suffer from intractable eating disorders. Ultimately your assistance will impact future eating disorder treatment options.

Your participation is entirely voluntary and the results of your participation will be anonymous. You have given your consent to participate when you complete and return the research packet. You can withdraw your consent by not completing the questionnaires contained within the research packet. Your decision to participate or not participate in the study will have no effect on the treatment services you receive. The researcher or designated data collector will answer any questions you might have about the research now or during the course of the project.

The procedure to complete the instruments contained within the research packet are as follows. You will meet with the researcher or the designated data collector who will explain the study and answer any questions you may have regarding the study. If you agree to participate, you will receive a research packet with the questionnaires to be completed. Completion of the research packet should take approximately 40-60 minutes. Demographic information will be requested, as well as the completion of three questionnaires measuring personality and affective traits, eating behaviors, and eating thoughts. Read the directions of each instrument carefully and follow the directions. You are not to identify yourself by name, address, telephone number, or social security number on any instrument in order to ensure anonymity. Please answer all questions, do not leave any responses blank. Once you answer all the questions and complete all the questionnaires within the packet, seal the envelope and write your envelope's code letter and number over the envelope flap. The code letter and number can be found on the back of the envelope on the lower right corner. This code has been established to further guarantee your anonymity. Once the envelope has been sealed and code written over the envelope flap return the envelope to the researcher or designated data collector.

There is the potential that an emotional reaction may occur due to the sensitive nature of the study and the fact that some of the variables being studied are the reasons you are presently in treatment. If you do experience an emotional reaction, please seek out the services of your individual therapist or group facilitator, who is prepared and available to process, any emotional reactions.

If you have any questions regarding your participation or the study in general please contact me at the following number (404) 421-0125 or by e-mail at lellis12@prodigy.net. I genuinely appreciate your participation in this research project.

If you would like to request the findings of this study, please contact me at the e-mail address above.

Sincerely,

Lisa K. Ellis, M.Ed.
Doctoral Candidate

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu.

APPENDIX D
CONSENT FORM

Dear Participant:

I am a graduate student in the Department of Counseling and Human Development Services at the University of Georgia and am conducting a research study that examines aspects of personality and emotions in women with eating disorders. The study is entitled "An Examination of Personality and Affective Dimensions in Women with Intractable Eating Disorders" and is under the supervision of Dr. Rosemary Phelps. You are being asked to participate in this research to help the mental health profession in developing a better understanding of some of the factors involved with women who suffer from intractable eating disorders. Ultimately your assistance will impact future eating disorder treatment options.

Your participation is entirely voluntary and the results of your participation will be anonymous. You consent to participate if you complete and return the research packet. Your decision to participate or not participate in the study will have no effect on the treatment services you receive. The researcher or designated data collector will answer any questions you might have about the research now or during the course of the project.

The procedure to complete the instruments contained within the research packet are as follows. You will meet with the researcher or the designated data collector who will explain the study and answer any questions you may have regarding the study. If you agree to participate, you will receive a research packet with the questionnaires to be completed. Completion of the research packet should take approximately 40-60 minutes. Demographic information will be requested, as well as the completion of three questionnaires measuring personality and affective traits, eating behaviors, and eating thoughts. Read the directions of each instrument carefully and follow the directions. Please do not identify yourself by name, address, telephone number, or social security number on any instrument in order to ensure anonymity. Please answer all questions, do not leave any responses blank. On completion, seal envelope, write code (see back of envelope, lower right corner) over the envelope flap for security, and return the envelope to the researcher or designated data collector.

There is the potential that an emotional reaction may occur due to the sensitive nature of the study and the fact that some of the variables being studied are the reasons you are presently in treatment. If you do experience an emotional reaction, please seek out the services of your individual therapist or group facilitator.

If you have any questions regarding your participation or the study in general please contact me at the following number (404) 421-0125 or by e-mail at lellis12@prodigy.net. I genuinely appreciate your participation in this research project.

If you would like to request the findings of this study, please contact me at the e-mail address above.

Participant Signature

Date

Witness

Date

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu.

APPENDIX E

DEMOGRAPHIC AND TREATMENT HISTORY QUESTIONNAIRE

Demographic and Treatment History Questionnaire

Occupation: _____

A. EATING DISORDER HISTORY

1. What do you feel to be the nature of your problems with food and/or eating? (Please describe your eating behaviors)

2. What is your current eating disorder diagnosis?
How long have you had this eating disorder?

3. Have you ever had any previous eating disorder diagnosis?
If yes, please specify **what eating disorder**, **when** and for **how long**.

4. How old were you when you first experienced eating disorder symptoms?

5. How long between the initial onset of your eating disorder symptoms and being first treated for your eating disorder?

6. Since developing your eating disorder, have you ever had any period of time in which you did not engage in eating disordered behaviors? _____ Yes _____ No
If yes, please specify when you had no eating disorder symptoms _____ and for how long .

B. TREATMENT HISTORY

7. Have you had any previous treatment for an eating disorder? _____ Yes _____ No
(Do not include present treatment episode)

If yes, specify the number of treatment episodes. _____
(Do not include present treatment episode)

Specify the **length** of each treatment episode(s):
(Do not include present treatment episode)

Specify the **treatment setting(s)**: _____in-patient _____out-patient _____individual group
(Do not include present treatment episode)

(OVER)

8. Was previous treatment for your eating disorder successful? _____ Yes _____ No
If yes, why do you believe treatment was successful and how long did you remain free from your eating disorder symptoms?

If no, why do you believe previous treatment for your eating disorder was not successful?

C. GENERAL HEALTH HISTORY

9. Do you currently have or have you previously had any additional mental health or psychological problem?
If yes, please specify what additional mental health or psychological problem.

10. Do you take any prescription medications? _____ Yes _____ No
If yes, please specify the prescribed medication and for what condition.

11. What is the worst thing that has ever happened to you?