Self-Multilating Borderlines: A Hierarchical And Empirical Examination Of Ego And Object Relations Deficits

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SELF-MUTILATING BORDERLINES: A HIERARCHICAL AND EMPIRICAL EXAMINATION OF EGO AND OBJECT RELATIONS DEFICITS

BY

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Dedication

To Miles
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Chapter 1
INTRODUCTION

The term self-mutilation is often synonymously paired with the term Borderline Personality Disorder in clinical settings. However, not all persons who self-mutilate have Borderline Personality Disorder, nor do all persons with Borderline Personality Disorder self-mutilate. Yet most of the empirical research focusing on Borderline pathology does not discriminate between mutilating and non-mutilating Borderline Personality Disorder patients. Thus, it is unclear whether these two groups share the same underlying psychodynamic structures and, therefore, whether they might warrant the same or substantially different treatments. This dissertation examines the differences between these two groups in the areas of object mastery and ego mastery as a possible precursor to future empirically driven psychodynamic treatments for Borderline Personality Disorder.

Background of the Problem

Self-mutilation is important in the study of Borderline Personality Disorder, as Borderline Personality Disorder patients frequently engage in self-destructive acts (Farvazza, 1993; Feldman, 1988). Shearer, Peters, Quaytman, and Wadman (1988) report that 80% of inpatients with Borderline Personality Disorder self-mutilate. Unfortunately, these self-destructive acts can be lethal. Stone (1987) reports that self-mutilating Borderline Personality Disorder patients are twice as likely to commit suicide as are non-mutilating Borderline Personality Disorder patients. Stone, Hurt, and Stone (1987) report that the suicide rate for inpatient Borderline Personality Disorder patients is about 9%.
Some acts of self-mutilation among Borderline Personality Disorder patients, while not intended to be lethal, are nonetheless bizarre and disturbing, for example wrist cutting and burning the skin with cigarettes (Gardner & Cowdry, 1985; Leibenluft, Gardner, & Cowdry, 1987). As mentioned previously, these non-lethal means of harming oneself are not seen in all cases of Borderline Personality Disorder. In fact, according to the symptom list in the Diagnostic and Statistical Manual of Mental Disorders, third edition, revised (DSM-III-R; American Psychiatric Association, 1987), as well as the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV; American Psychiatric Association, 1994), self-mutilation is not a necessary condition for a Borderline Personality Disorder diagnosis, nor is it a sufficient condition for a Borderline Personality Disorder diagnosis. In other words, while many Borderline Personality Disorder patients mutilate, many do not, and, while self-mutilation is often associated with Borderline Personality Disorder, it is evident as well in persons with different disorders who have no Borderline Personality Disorder diagnosis.

Many who have studied self-mutilation believe that self-mutilating acts can be a means of reducing pain or relieving some state of tension, often a dysphoric or dissociative state (Fava, 1989; Feldman, 1988; Leibenluft, Gardner, & Cowdry, 1987; Pattison & Kahan, 1983; Simeon et al., 1992; van der Kolk, Perry, & Herman, 1991). Leibenluft, Gardner, and Cowdry (1987) tie self-mutilation to relief of a dysphoric state. They present case studies to substantiate their five-stage theory of self-mutilation. According to their theory, a Borderline Personality Disorder patient experiences a precipitating event (stage one) such as rejection which leads to a rage and ultimately a
dysphoric state (stage two). While the dysphoric state leads to a desire to self-mutilate, the Borderline Personality Disorder patient tries to ward off the desire to mutilate (stage three) but after a period of distress gives into the desire to self-mutilate (stage four). Following the self-mutilating act, the Borderline Personality Disorder patient experiences an aftermath (stage five) such as shame and confusion. The writers also observe an analgesic state as present in approximately half of their patients during the dysphoric state, thereby rendering the self-mutilating act tolerable. They proceed to question whether the analgesic state is due to a biochemical mechanism or defense mechanisms. Researchers have found some preliminary data to support a biochemical link to self-mutilation as well as a defense mechanism link (Fowler, Hilsenroth, & Nolan, 2000; Simeon et al., 1992).

Regarding biochemical correlates of self-mutilation, Simeon et al. (1992) empirically researched biological and psychological correlates of self-mutilation. Their study matched self-mutilators with personality disorders with non-self-mutilators with personality disorders. Results supported a serotonergic dysfunction contribution to self-mutilation. However, the sample size for the biological correlates was small, limiting generalizability. Also, their study did not focus exclusively on Borderline Personality Disorder. However, their study had several pertinent findings for psychological correlates of self-mutilation in persons with personality disorders. Results showed a significant positive correlation between self-mutilation, impulsivity, anger, and anxiety. Perhaps this impulsive and aggressive tendency of self-mutilation can be viewed as a defense mechanism aimed at self-soothing.
Borderlines are well known for their use of primitive and maladaptive defense mechanisms such as splitting and acting out (Kernberg, 1985). The relevance of these defenses and overall defensive structure as it relates to mutilation in Borderlines is unclear. A review of the empirical studies surrounding Borderline Personality Disorder as a whole and defensive structure clearly reveals the use of maladaptive defenses by Borderlines. Bond, Paris, and Zweig-Frank (1994) compared borderlines and non-borderlines on defensive structure using a self-report measure. Their results showed that Borderlines use maladaptive and image distorting defense mechanisms significantly more frequently than non-Borderlines and that non-Borderlines use adaptive defense mechanisms significantly more frequently than Borderlines. Maladaptive defense mechanisms for the purposes of their study were defined as acting out, projection, passive aggression, withdrawal, and inhibition. Image distorting mechanisms were defined as devaluation, primitive idealization, omnipotence, and splitting. Adaptive mechanisms were defined as sublimation, humor, and suppression. The authors proceeded to say that these defenses are used by persons who can master anxiety, painful emotions, and threatening impulses. Accordingly, Borderlines, unable to master these distresses, resort to maladaptive and image distorting mechanisms to re-establish equilibrium. As they mentioned in their discussion, the use of these maladaptive and image distorting defenses parallels Kernberg's theory of Borderline pathology (discussed in Chapter II of this dissertation) as occupying a more primitive level of development than non-Borderlines. The study did not, however, discuss the issue of self-mutilation. The study did not separate mutilators from non-mutilators, but rather categorized these
two groups into one disorder with similar defensive structures. As mentioned earlier, some Borderlines self-mutilate, while other Borderlines do not. The Diagnostic and Statistical Manual of Mental Disorders, Third edition, revised, (DSM IIIR) indicates that Borderlines who mutilate have a more severe case of the disorder. Perhaps then the defenses of the non-self-mutilating group are more adaptive or mature than those of the self-mutilating group.

Self-mutilation has also been empirically tied to abuse and/or disrupted attachments during childhood. Van der Kolk, Perry, and Herman (1991) empirically investigated the relationships between self-harm and childhood trauma and disrupted attachments. Results showed childhood sexual and physical abuse to be significant predictors of self-cutting as well as suicide attempts. Using a follow-up stage in the study, they were able to show that neglect is the best predictor of self-destructive acts. Their results also indicate that while childhood trauma launches one into self-destructive behaviors, the absence of secure attachments sustains the behavior. Perhaps object relations then is the key to self-mutilation. Feldman (1988) supports the relationship between pathological object relations and self-mutilation. He states that precipitants of cutting in hospitalized Borderline Personality Disorder patients revolve around perceptions of object loss and “an impasse in interpersonal relations” (Feldman, 1988, p. 254).

While the above research is relevant to the study at hand, it does not examine the differences between mutilating and non-mutilating Borderline Personality Disorder patients exclusively. There are, however, two impressive studies to date that do strictly
compare the groups of mutilating and non-mutilating Borderline Personality Disorder patients. First, Dutil, Fycer, Leon, Brodsky, and Frances (1994) conducted an exploratory investigation of clinical correlates of self-mutilation. All subjects had a diagnosis of Borderline Personality Disorder. The sample was divided into three groups: frequent mutilators, infrequent mutilators, and non-mutilators. Among their findings, frequent mutilators were shown to more often have a co-morbid Axis 1 diagnosis of Major Depression, Bulimia Nervosa, or Anorexia Nervosa. Frequent mutilators were also shown to be at a higher risk for exhibiting suicidal conduct. Contrary to the results of Simeon et al. (1992), the study did not support a significant relationship between self-mutilation and aggression and anxiety. In addition, there were no significant differences found between mutilators and non-mutilators with regard to dissociation as previously found by van der Kolk, et al. (1994).

More recently, Fowler, Hilsenroth, and Nolan (2000) empirically examined differences between mutilating and non-mutilating Borderline Personality Disorder patients using Rorschach protocols. Contrary to Dutil et al. (1994) and supporting the findings of Simeon et al. (1992), their results showed self-mutilating Borderline Personality Disorder patients to have more aggression. The study also showed non-mutilating Borderline Personality Disorder patients to have more pathological object representations which supports Feldman's (1988) object relations findings mentioned above. In addition, Fowler, Hilsenroth, and Nolan (2000) examined defensive structure between the two groups of Borderline Personality Disorder patients. Their findings suggested that self-mutilating patients experience more defensive idealization,
devaluation, and splitting than did the non-mutilating group which partially supports Kernberg’s psychodynamic theory of Borderline Personality Disorder discussed in Chapter II of this dissertation.

Statement of the Problem

Diagnostically clean data sets examining the issue of self-mutilation in Borderline Personality Disorder are limited. To understand why some Borderline Personality Disorder patients mutilate while others do not, more samples of mutilating Borderline Personality Disorder patients need to be compared with samples of non-mutilating Borderline Personality Disorder patients.

In addition, contradictory findings in the areas of object relations and ego structure/defenses necessitate further examination of these concepts as they relate to self-mutilation in Borderline Personality Disorder patients. Both object deficits and ego deficits need to be examined across the two groups: self-mutilating Borderline Personality Disorder patients and non-self-mutilating Borderline Personality Disorder patients using additional psychodynamically informed instruments. It is not clear from the findings above what role(s) object relations and defenses play in the desire for a Borderline Personality Disorder patient to mutilate. While Fowler, Hilsenroth, and Nolan (2000) have found self-mutilating Borderlines to have more pathological object representations and tend more frequently to use primitive defenses such as devaluation, splitting, and primitive idealization, adding to our understanding of repetitions between the two groups, research is lacking in the area of progressive and regenerative shifts in object representations and use of defense mechanisms between these two groups.
Another avenue needing examination between the groups is arousal level. The major theories of Borderline Personality Development discussed in Chapter II of this dissertation all involve the maturational issues of object relations and defenses. While these theories are frequently referred to in clinical practice and seem to make sense from observational standpoints, their maturational object relation and defense concepts have little empirical backing using hierarchically based psychodynamic instruments. Although Fowler, Hilsenroth, and Nolan (2000) did address the developmental levels of Kernberg's theory using Rorschach protocols, their research did not directly address the issue of arousal conditions and elasticity of interpersonal and defense functioning as a variable. Arousal condition is important because at any given time, any person whether psychotic, borderline, narcissistic, neurotic, or normal, can regress to a lower developmental level depending on the environmental triggers. Even the most mature person will experience fluctuations—though sometimes subtle—in affect, ego, and object relations functioning on a regular basis. Vaillant's (1977) quote of Frank Barron aptly applies here:

"...psychopathology is always with us and soundness is a way of reacting to problems, not an absence of them (Vaillant, 1977, pp. 3-4)." Conflict and distress are part of life; the ability to respond to these conflicts with fluidity of ego functioning, however, is not necessarily part of life. It is one's ability to withstand intrapsychic shifts, that is progressions and regressions, in response to life's conflicts without severe interruption to overt functioning that truly signifies ego and object maturation/mastery (Wilson, 1998).

Because current empirical studies do not address the issue of arousal conditions as it relates to self-mutilation in Borderline Personality Disorder patients, it is unclear
whether non-mutilating Borderline Personality Disorder patients have more elasticity in
their interpersonal struggles and defense use than do self-mutilating Borderline
Personality Disorder patients. Therefore, the differences between self-mutilating and
non-mutilating Borderline Personality Disorder patients need to be empirically examined
under different arousal conditions to determine the role object mastery and ego mastery
play in the desire of a Borderline Personality Disorder patient to self-mutilate.

Definition of Terms

Self-mutilation

For the purposes of this research, self-mutilation is defined as the intentional act
of harming oneself by cutting, burning, or abrading one's skin. This follows the Fowler,
Hilsenroth, and Nolan (2000) definition of self-mutilation. This behavioral definition
allows objective corroboration of external behavior, relying less on clinical judgment
which can be subjective and judgmental.

Borderline Personality Disorder

Although the definition of Borderline Personality Disorder varies when discussing
it as a theoretical concept, for statistical and operational purposes, the medical definition
of Borderline Personality Disorder as defined by the Diagnostic and Statistical Manual of
Mental Disorders is generally used to diagnose the disorder. This manual lists symptoms
necessary for the diagnosis of the disorder. Although it can be seen as reductionistic to
make the diagnosis based on a list of symptoms, this medical model allows the Diagnosis
to be universally applied with relative accuracy and allows for empirical studies of the
disorder.
According to the Diagnostic and Statistical Manual of Mental Disorders (Third edition, revised), Borderline Personality Disorder is an Axis II personality disorder with a pervasive pattern of instability of mood, interpersonal relationships, and self-image, beginning by early adulthood and present in a variety of contexts as indicated by at least five of the following:

1. a pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of overidealization and devaluation;

2. impulsiveness in at least two areas that are potentially self-damaging, e.g., spending, sex, substance abuse, shoplifting, reckless driving, binge eating (Do not include suicidal or self-mutilating behavior covered in [5].);

3. affective instability: marked shifts from baseline mood to depression, irritability, or anxiety, usually lasting a few hours and only rarely more than a few days;

4. inappropriate, intense anger or lack of control of anger, e.g., frequent displays of temper, constant anger, recurrent physical fights;

5. recurrent suicidal threats, gestures, or behavior, or self-mutilating behavior;

6. marked and persistent identity disturbance manifested by uncertainty about at least two of the following: self-image, sexual orientation,
long-term goals or career choice, type of friends desired, preferred values;

7.) chronic feelings of emptiness or boredom;

8.) frantic efforts to avoid real or imagined abandonment (Do not include suicidal or self-mutilating behavior covered in [5].) (APA, 1987, p.347)

Although the manual cites Borderline Personality Disorder as a true disorder, there have been disorders listed in previous manuals that have been removed as they no longer fit the American Psychiatric Association’s definition of pathology. Homosexuality is just one example of such a disorder. Therefore, to study clinical correlates of Borderline Personality Disorder in this dissertation, it is necessary to establish the validity of the disorder. Van Reekum, Links and Boiago (1993) provide evidence for the validity of Borderline Personality Disorder by citing five family history studies showing an increased prevalence of Borderline Personality Disorder in relatives of Borderline Personality Disorder patients. According to them, if a disorder is a valid disorder, then the relatives of a person with the disorder should have an increased prevalence of the disorder. However, in the case of Borderline Personality Disorder family studies, Nigg and Goldsmith (1994) note that the increased prevalence might be due to a comorbid depressive disorder as studies have shown a link between Borderline Personality Disorder and affective disorders. Family studies controlling for affective comorbidity are lacking.
Ego Mastery

Current psychoanalytically informed theorists use the term ego strength when referring to ego structure. Ego strength generally refers to an individual’s ability and capacity to acknowledge reality without reverting to the use of primitive defenses (McWilliams, 1994). While this definition takes into consideration type of regression, that is movement from a higher level of defense use to a lower level of defense use, it does not assess the quality of regression. This paper defines ego mastery as one’s ability to experience but limit progressive and regressive shifts in defense mechanisms under different arousal conditions.

Object Mastery

One cannot fully examine Ego Mastery without also studying Object Mastery. As will be elaborated on in Chapter II, ego and object relations are intimately related in normal as well as Borderline Personality Disorder patients. Psychoanalytically informed theories regarding Borderline pathology include references to both ego and object functioning (Kernberg, 1985; Masterson & Rinsley, 1975). According to Vaillant (1977), one reason ego mechanisms are enlisted is to manage conflicts with others.

While it is difficult to separate ego and object concepts in the developmental theory of Borderline Personality Disorder, it is necessary to separate the two constructs for empirical purposes. Separating the concepts operationally will allow for a clear understanding of their role(s) in the Borderline Personality Disorder patients’ desire to self-mutilate.
Object relations, for the purpose of this paper, is defined as one's experiential perceptions and images of significant others. Object mastery is defined separately from ego mastery as one's ability to limit regressive shifts in interpersonal functioning under different arousal conditions.

Summary

Self-mutilation is a frequent symptom of Borderline Personality Disorder. However, it is not a necessary condition for the diagnosis of the disorder. The differences between those who mutilate and those who do not are not clear because of limited research focusing exclusively on comparisons between these two groups as well as contradictory findings regarding the roles of object relations issues and use of defense mechanisms in acts of self-mutilation. Theories of object relation deficits and ego deficits abound in the psychodynamic literature regarding Borderline Personality Disorder and have some limited empirical backing; however, the cause or nature of self-mutilation among persons with Borderline Personality Disorder is still unclear. This dissertation empirically addresses the issue of self-mutilation among Borderlines in the context of psychodynamically informed object relations and ego psychology theories to determine the relevance of object relations deficits and ego deficits in distinguishing between those who mutilate and those who do not. The research is based on a hierarchical concept of personality development with Borderline Personality Disorder placed on the lower end of that continuum. The research focuses on the differences between non-mutilating Borderlines and mutilating Borderlines in the areas of object mastery and ego mastery as determined through the progressive and regressive shifts in
object representations and use of defense mechanisms during low and high arousal experiences.
Chapter II

REVIEW OF RELATED LITERATURE

Etiology

The exact cause of Borderline Personality Disorder is not known. Several etiological models have been proposed to account for the emergence of the disorder. These include, but are not limited to, object relations deficits, affective instability, genetic predispositions, stress, and lack of impulse control. These etiological theories, however, often appear to describe borderline symptomatology rather than providing a causal relationship. Etiology and symptomatology have not been clearly ferreted out. Perhaps a multitude of factors actually contribute to the development of the disorder. Paris (1993) proposes a biopsychosocial model of Borderline Personality Disorder which is presented later in this chapter.

Biological/Genetic Influences

Recently, attention has been given to genetic contributions in personality disorders (Livesley, Jang, Jackson, & Vernon, 1993; Siever & Davis, 1991). In order to establish a genetic basis for a disorder, twin and adoptive studies are usually conducted. Unfortunately, there are no robust adoptive Borderline Personality Disorder studies (Nigg & Goldsmith, 1994; van Reekum, Links, & Boiago, 1993). In 1984, Torgerson published a twin study to address the genetic contribution in the development of two different personality disorders: Schizotypal Personality Disorder and Borderline Personality Disorder. Although the results did not sufficiently support a genetic contribution to the development of Borderline Personality Disorder, the Borderline Personality Disorder
sample was small (Nigg & Goldsmith, 1994; van Reekum, Links, & Boiago, 1993; Torgerson, 1984).

Although there has been little research into the genetics of Borderline Personality Disorder, studies have shown that normal personality traits are somewhat heritable (Eysenck, 1990; Livesley, Jang, Jackson, & Vernon, 1993). McGuffin and Thapar (1992) discuss three types of research supporting a genetic link to personality: animal temperament studies, psychophysiological studies, and self-report measures with relatives living together, separated relatives, and twins. In the area of self-report measures, studies using questionnaires have shown a relationship between personality and genetics. Leohlin et al. (1988), for example, support a genetic link to normal personality. The question must be raised, however, as to what aspects of personality are genetic. McGuffin and Thapar (1992) raise the question of there possibly being a differential heritability for personality traits.

While there is clearly evidence to support a genetic link to normal personality traits, one cannot assume that abnormal personality has a genetic link as well without empirical evidence. There are some empirical studies establishing a genetic link for certain abnormal personality traits and/or personality disorders (Livesley, Jang, Jackson, & Vernon, 1993; Siever & Davis, 1991). The Siever and Davis (1991) study, however, did not control for environmental influences making it difficult to determine the degree to which genetics influenced abnormal personality development. Livesley, Jang, Jackson, and Vernon (1993) studied the magnitude of both genetic and environmental contributions to personality development using a structural equation model design. They
conclude that personality traits showing a genetic basis also seem to be affected by environmental stimuli. They emphasize the need for etiological theories to include the way in which genetic vulnerabilities affect one's reaction to environmental stimuli. Because their results are similar to those for normal personality studies, they support the notion that personality characteristics exist on a continuum with abnormal personality characteristics being extremes of normal personality characteristics. Thus, a dimensional classification of personality is best.

The scope of this dissertation does not permit an exhaustive review of such studies; however, it is important to note those studies linking genetics and criminality and/or antisocial personality disorder (Cadoret et al., 1985; McGuffin & Gottesman, 1984; McGuffin & Thapar, 1992) as there is often an overlap between borderline and antisocial features. Research is clearly lacking in the area of genetics and Borderline Personality Disorder as previously mentioned. Future research with Borderline Personality Disorder twin and adoptive studies is needed to examine the possibility of a genetic link to Borderline Personality Disorder.

Physiological Correlates

Recent psychiatric research suggests a possible physiological component of Borderline Personality Disorder. Brown et al. (1982) studied the histories of 12 Borderline Personality Disorder subjects. These subjects did not have a known affective disorder. Aggressive behaviors and suicide attempts were shown to be significantly associated with lower levels of 5-hydroxyindoleacetic acid levels. This acid, a serotonin metabolite, might thus be a contributing factor in aggressive and suicide attempts. This
study did not however measure acid levels in Borderline patients without aggressive behaviors or in normals.

In an earlier study by Traskman, Asberg, Bertilsson, and Sjostrand (1981), suicide attempters were shown to have a significantly lower level of 5-hydroxyindoleacetic acid in the cerebrospinal fluid suggesting an association between the serotonin metabolite and suicidal behavior. While this study did use a normal control group, subjects were chosen because of suicide attempts rather than for their diagnostic classification. The patients were then categorized according to affective difficulties, depression versus no depression, rather than being categorized according to the presence or absence of character pathology.

**Trauma History**

Childhood abuse has been cited as a possible reason for the development of Borderline Personality Disorder (Goldman, D’Angelo, DeMaso & Mezzacappa, 1992; Herman, Perry, & van der Kolk, 1989). Goldman, D’Angelo, DeMaso, and Mezzacappa (1992) studied the physical and sexual abuse histories of 44 children with Borderline Personality Disorder and 100 outpatient children without Borderline Personality Disorder. There was no significant differences between the groups on sexual abuse; however, there were significant differences between the groups on the prevalence of physical abuse as well as the combination of physical and sexual abuse which they claim supports their hypothesis that Borderline Personality Disorder is associated with past trauma. Paris (1998) questions the belief that past trauma causes personality disorders. He contends that most of the studies in this area are correlational and results may be due
to latent variables. He also points out that studies investigating the relationship between trauma and personality disorders could be affected by a “base rate problem” because childhood trauma frequently occurs in the general population as well. His main conclusion is that the issue of trauma and the development of personality problems needs to be viewed as a gene-environment interaction (Paris, 1998) as illuminated in the section on Biological/Genetic Influences.

**Impulse Control Disorder**

In addition, a dimensional family study by Silverman et al. (1991) reported family members of Borderline Personality Disorder to have an increased prevalence of affective and impulsive behaviors. The scales that they used, however, did not have established reliability and validity (Nigg & Goldsmith, 1994).

**Biopsychosocial Model**

According to Paris (1993), one cannot understand the development of Borderline Personality Disorder without placing it in a biopsychosocial perspective, because Borderline Personality Disorder is a disease with multiple causes. Further, to single out a cause for the development of this complex disorder would be reductionistic. Therefore, Paris proposes that the single factors frequently associated with Borderline Personality Disorder be viewed as risk factors rather than causes in the development of the disorder. Paris goes on to support a diathesis-stress model of Borderline development suggesting that a biological predisposition exists but does not get expressed without environmental triggers or stressors. Unfortunately, the biological and environmental markers have not been clearly determined. Current research suggests some possible causes in both areas,
but many of these studies have not been replicated or have had contradictory results.

Psychodynamic Theories

There are numerous theories regarding the development of Borderline Personality Disorder, however, the oldest and most relied upon theories are psychodynamic. Even the current and well respected Borderline Personality Disorder theorist, Marsha Linehan, can be easily shown to fall into the psychodynamic camp despite her insistence that her theory is behavioral in nature. Before psychodynamic theories of Borderline Personality Disorder are described, it would be appropriate to provide a brief historical background of the development of psychodynamic object relations and ego theories, as specific psychodynamic Borderline theories emphasize one or the other of these constructs.

Historical Background

Freud is the founding father of psychoanalytic theories. His theory focused on the id; instinctual drives which desired immediate gratification. Over a century has passed since Freud’s psychoanalytic theory of instinctual drives emerged. Attempts at modifying his theory are numerous. Jung, Adler, Ferenczi, Fromm, Horney, and Sullivan are a few of the more notable theorists seeking to modify Freud’s theory. In the 1930’s, a major split occurred among psychoanalytic clinicians and theorists. Three camps resulted: (a) Freudian diehards or those strictly adhering to drive theory, (b) Object relations theorists, and (c) Ego psychologists (Greenberg & Mitchell, 1983).

Development of Object Relations Theory

Generally considered the first psychoanalytic theorist to introduce the object as a necessary part of normal as well as pathological development, Melanie Klein’s theory
was a transitional theory extending the views of Freud's drive theory while introducing the idea of relational influences. Because of spontaneous shifts in her theory and her general disorganization in her writings, her theory has often been misunderstood (Greenberg & Mitchell, 1983). Nonetheless, an attempt is made here to explain her major theoretical position as incorporating objects into psychodynamic theory.

Melanie Klein. Klein believed toward the latter part of her career that behaviors, affects, and identity were based on phantasies and anxieties about internalized object relationships. The child seeks to destroy his/her mother as both a real external being and as an internally mirrored object due to frustration and anxiety the mother creates during the weaning process. Fearing the destruction of the object, the child experiences a depressive anxiety. To alleviate this depressive anxiety, the child uses phantasies and behaviors to repair his/her mother (Greenberg & Mitchell, 1983; Klein, 1964). This clearly moves the child from a Freudian view as a drive gratifier to an interpersonal being with love for another.

Klein believes that drives exist but that they are directed toward objects (Klein, 1975); whereas Freud believes that objects are secondary and subordinate to drives (Greenberg & Mitchell, 1983). While Klein has added to current psychoanalytic theory by introducing the object, she does not sufficiently address the development of psychopathology other than to suggest that psychopathology is a result of the child's inability to handle his/her aggression toward the object. Major object relations theorists following Klein have more directly addressed the development of psychopathology. In addition, they have focused on real interactions between the child and his/her parents.
rather than merely the child’s drives being directed at objects. Guntrip and Fairbairn are two of the well-known psychodynamic theorists emphasizing the centrality of real interpersonal interactions in normal as well as pathological development.

Development of Ego Psychology

Heinz Hartman was the first psychoanalyst to move beyond Freud’s concept of the ego as a structural entity to that of an adaptive mechanism. His original works were published in German in the late 1930’s becoming available to psychoanalysts in English in 1958 with the publication of the English version of his book, *Ego Psychology and the Problem of Adaptation*. Integrating the concepts of adaptation, defense, and fitting together, Hartmann advanced psychoanalysis from a theory of psychopathology to a theory that incorporates both psychopathology and normal development (Blanck, G. & R., 1994). According to Hartman, the inborn ego has an adaptive function. Hartman posited that there is a reciprocal relationship between the individual and his/her environment. Adaptive activity will either change the individual or the environment. This adaptive capacity can be either regressive or progressive. Regardless, the individual is no longer seen as a product of his drives as Freud previously postulated. In fact, the inborn ego has perceptual and protective functions and the ability to mature over time (Blanck, G. & R., 1994). According to Hartmann, instinctual conflict is not the only precipitant of development. The inborn ego apparatus is conflict-free and evolves over time (Hartmann, 1958; Plutchik, R., 1995).

In sum, as Klein was an offspring of Freud’s drive theory incorporating the object as an important aspect of psychoanalytic theory, Hartman served as the offspring of
Freud’s drive theory for the advancement of the ego in psychoanalytic theory. These two theories, Klein for object relations and Hartman for ego psychology, were the springboards for the development of the object relations and ego psychology movements and ultimately the development of current psychoanalytic theories involving object relations and ego deficits in the development of Borderline Personality Disorder.

While these two launched object relations and defense mechanisms to the forefront of psychoanalytic theory, they did not adequately address the issues at the forefront of this empirical study. Hartman’s theory certainly advanced psychodynamic theories of ego functioning. However, he saw adaptation and health as inseparable (Vaillant, 1977). It is argued that adaptation is used at every level of pathology and, therefore, not synonymous with health but rather an attempt at healthier functioning. Klein’s theory advanced psychodynamic theories of object relations. However, she never directly addressed the issue of object relations in pathological populations.

**Integrating Object, Ego, and Borderline Personality Disorder**

More recently, psychodynamic theorists have realized the importance of both object relations and ego psychology in the development of pathology (Greenberg & Mitchell, 1983; Pine, 1990; Sugarman, A.; 1986; Sugarman & Lerner, 1980). There has been a shift toward synthesizing the manifestations of object and ego phenomenon in pathological populations. Integrative attempts, however, do not fully synthesize the two phenomena. While both ego and object are addressed in recent psychodynamic theories, each theorist emphasizes one aspect over the other. These theorists do not provide sufficient empirical evidence to support their observations and clinical intuitions.
Sugarman and Lerner (1980) emphasize the need for empirical research to clarify the relationship between ego and object in Borderline pathology. This lack of empirical evidence does not preclude the possibility that ego and/or object deficits are the major contributors to personality disorders, but rather makes it impossible to fully support these theories in practice. Empirical issues and data regarding personality disorders will be discussed later in this paper.

Psychodynamic Theories of Borderline Personality Disorder

A number of psychodynamic ideas regarding the development of the Borderline Personality Disorder have emerged through the years. One major psychodynamic theory regarding the Borderline condition is that of Otto Kernberg. His theory of Borderline pathology is outlined in this paper, as it is the most common and well-known theory to date on Borderline pathology. It is not suggested here that Kernberg’s theory is the best theory of Borderline pathology, for determining the best theory is not the focus of this study, neither is an exhaustive review of psychodynamic theories of Borderline pathology. Rather, Kernberg’s theory is presented as an example of a current psychoanalytically informed theory of Borderline pathology frequently referred to in clinical practice that integrates both object relation and ego deficits on a hierarchical continuum.

Otto Kernberg. Kernberg (1985) uses the term borderline personality organization to refer to a specific and consistent pathological personality organization that lies between a neurotic personality organization and a psychotic personality organization. He believes that this personality organization does not fluctuate but is
rather stable over time. In addition, this pathological personality organization is chronic
and characterized by a constellation of: (a) typical symptoms, (b) typical defenses or ego
structure, (c) typical object relationships, and (d) typical genetic-dynamic structures.

Regarding typical symptoms, Kernberg describes a number of symptoms that
might indicate a borderline personality organization. He considers these symptoms to be
presumptive signs of the disorder. According to him, a definitive diagnosis of the
borderline personality organization can only be made, however, if the typical ego
pathology is present. Some of Kernberg’s descriptive symptoms that might indicate
borderline pathology include but are not limited to chronic anxiety, multiple phobias,
obsessive-compulsive behaviors, conversion symptoms, dissociative states,
hypochondriacal symptoms, polymorphous perverse sexual trends, prepsychotic
personality structures, impulse neurosis and addictions, and character structures such as
hysterical personality, narcissistic personality, and depressive-masochistic personalities.
Detailing each of these descriptive symptoms is beyond the scope of this dissertation.
For more information regarding these symptoms please refer to Kernberg’s (1985) book,
Borderline Conditions and Pathological Narcissism. It is this author’s opinion that
Kernberg’s symptom list is not helpful in identifying Borderline Personality Disorder,
because it is all inclusive. His laundry list of presumptive symptoms could be evidence
of numerous pathological illnesses, not just Borderline Personality Disorder. While he
uses the disclaimer that two or three symptoms make a strong presumptive diagnosis only
and that final diagnosis must rest on the presentation of a certain ego pathology, his
symptom list is too inclusive and lacks empirical backing.
Kernberg (1985) believes the crux of the borderline personality organization lies in specific and nonspecific aspects of ego weakness. Nonspecific manifestations of ego weakness are: “a.) lack of anxiety tolerance; b.) lack of impulse control; c.) lack of developed sublimatory channels” (Kernberg, 1985, p.22). While Kernberg notes that these nonspecific manifestations are difficult to assess, his later writings do not demonstrate empirical attempts to quantify and measure these manifestations. Another aspect of Kernberg’s description of ego weakness in the Borderline personality organization relates to the Borderline’s shift to primary-process thinking which could be revealed through projective testing. Unfortunately, Kernberg has not measured this empirically. Kernberg also describes the ego weakness or division of splitting often seen in the borderline personality organization. Splitting involves the ego’s attempt to keep contradictory experiences separate as a way to manage anxiety associated with the contradictory states. A lack of ego integration or ego stability results. This characteristic defense of splitting can also work in tandem with primitive idealization, projection, denial, and omnipotence and devaluation.

Although Kernberg emphasizes ego deficits as the definitive diagnostic tool for borderline personality organization, he does write about a connection between pathological object relations and borderline personality organization. However, his discussion of pathological object relations is intertwined with the ego deficits of the Borderline. Object relations and ego cannot be completely separated. He states, “In my view, internalized object relations constitute substructures of the ego, substructures that are, in turn, hierarchically organized (Kernberg, 1984, p.5).”
According to Kernberg (1972), the object relations difficulty of the Borderline revolves around the Borderline’s inability to form integrated self and object images. Either good or bad images predominate due to the experience of contradictory ego states and the necessary use of splitting to prevent or protect against the anxiety felt if the contradictory ego states were acknowledged. This inability to form an integrated self concept as well as an integrated object concept in relation to the self concept, is labeled identity diffusion, “a typical syndrome of the borderline personality organization” according to Kernberg (1985, p.39).

Masterson has criticized Kernberg for minimizing the mother’s role in Borderline pathology (Masterson & Rinsley, 1975). A brief outline of his position is warranted. Masterson and Rinsley (1975) attribute borderline phenomenon to the mother. Specifically, they believe that it is the withdrawal of the mother’s libidinal availability during the child’s separation-individuation attempts that leads to the development of the Borderline disorder. The mother withdraws her libidinal (supplies) because the child’s individuation attempts threaten her desire to (cling) to her child (Masterson & Rinsley, 1975). The child then introjects maternal interactions of reward and withdrawal which leads to the development of the Borderline’s split self and split object schemas. The child is thus unable to integrate positive and negative images of the self and other because it would require further separation-individuation steps leading to further maternal withdrawal. Aggression is thus provoked by the mother with no means for neutralizing it (Masterson & Rinsley, 1975).
Ego and Object as Hierarchical Concepts

Kernberg's theory of Borderline organization clearly synthesizes aspects of ego and object relations; however, his theory does not adequately address Borderline pathology as a hierarchical concept. As mentioned previously, Kernberg believes that Borderline pathology is stable and consistent over time. This does not allow for the regressive and progressive shifts often associated with hierarchical concepts. It has been argued that true hierarchical concepts, particularly those of an epigenetic nature, allow for both a synthesis of psychoanalytically informed theories and flexible movement from one maturational level to another (Wilson & Gedo, 1993). This movement is multidirectional. In other words, it can be progressive, regressive, or a combination of both. Human beings have the unique capacity to regress and progress interpersonally and defensively in relatively short periods of time. It has been suggested by Wilson, that our psychodynamic make up is much more fluid than previously thought (Wilson, 1998).

Although not specific to Borderline pathology, one particular and impressive hierarchical study regarding defense mechanisms and regression needs to be addressed here, that of George Vaillant.

George Vaillant

George Vaillant is well-known for his empirically based defense mechanism hierarchy. Vaillant's (1976; 1977) psychoanalytic concepts regarding defense mechanisms are based on a longitudinal study of undergraduate men and their adaptations to life's circumstances. His basic premise is that defense mechanisms are adaptive and can be placed along a continuum of health and maturity. In his book,
Adaptations to Life. Vaillant provides a list of hierarchically ordered ego/defense mechanisms ranging from immature to mature. His list of 18 defense mechanisms has been empirically supported.

According to Vaillant (1977), ego mechanisms or defenses are merely responses to intrapsychic distress, offering restorative properties. He states that ego mechanisms are not to be equated with abnormal functioning. However, the consistent use of immature defenses and interpersonal functioning in adulthood are what most psychoanalytically informed clinicians and/or theorists use to describe a patient’s abnormal/pathological functioning. It must be noted here, that Vaillant’s ideas regarding defense mechanisms, like those of Kernberg and other psychanalytically informed theorists and clinicians, are intimately tied to object relations. He eloquently states, “...conscious learning plays no part in the acquisitions of defense mechanisms; rather the response of people outside of us- not just events- shapes our modes of adaptation (Vaillant, 1977, p.63).” He goes on to say, “In sum, it appears that close relationships, not our culture, shape our adaptive resources. In turn, good adaptation further enhances close relationships (Vaillant, 1977, p.71).

Vaillant proposes movement rather than stagnation in ego functioning by providing a continuum of defenses. However, he focuses on progressive shifts and maturation, that is health, as he discusses the evolution of defenses through time and life experience. While this positive view of defenses is refreshing, Vaillant does not fully consider regressive shifts in ego and object functioning. Vaillant’s hierarchical theory of defense mechanisms and corresponding research is magnificent. However, a strict
adherence to some defenses as "healthier" than others is a mental health quagmire.

Fortunately, Vaillant (1977) acknowledges this danger by commenting that definitions of mental health are relative, an argument proposed for the use of ego mastery and object mastery as empirical concepts in this research project.

In addition, Vaillant’s research is based on a high functioning population which, while considered a first for seminal and robust research in the area of psychoanalytically informed theories of ego functioning, cannot be assumed to fit a pathological population.

Summary

Vaillant stressed the type of regression rather than the quality of regression in his research. This paper proposes and seeks to empirically examine both progressive and regressive shifts in ego and object functioning as all people can experience on a daily even hourly basis. It is hypothesized that the fluidity and quality of progressions and regressions is more important than the type of progression which I plan to demonstrate in the aggregated cases of self-mutilating and non-mutilating Borderline Personality Disorder patients.

This dissertation focuses on quality of regression along with quality of object representation. In other words, I hypothesize that type of regression in ego and object functioning is not as important as quality of regression in ego and object functioning in Borderline pathology, specifically between self-mutilating and non-mutilating types of Borderline pathology.
Chapter III

METHODOLOGY

Subjects

There are two groups in this study with 93 total subjects. One group consists of 45 self-mutilating females over the age of 18 with a DSM IV diagnosis of Borderline Personality Disorder hospitalized in an inpatient psychiatric unit in the northeastern United States. The other group consists of 48 non self-mutilating females over the age of 18 with a DSM IV diagnosis of Borderline Personality Disorder hospitalized in the same inpatient psychiatric unit.

Procedures

Subjects were sampled by the administrative and research staff of a northeastern mental health facility that specializes in the treatment of personality disorders, particularly, Borderline Personality Disorder. Only 1993-1997 admissions were considered. Only female subjects with a DSM IV diagnosis of Borderline Personality Disorder given by both a board certified and licensed psychologist and psychiatrist were considered. Diagnoses were made by these licensed and certified professionals following a review of the data from an initial interview. The initial interview data consisted of the admission consultation, initial psychotherapy session, psychopharmacological evaluation, collateral family interviews, psychosocial history, prior hospital records and liaison contacts with outpatient therapists. In addition, the DSM IV diagnosis of Borderline Personality Disorder was confirmed for all cases by an independent psychiatrist. Borderline Patients with co-morbid axis I psychotic disorders were excluded from the
sample. Further, only subjects having completed the Thematic Apperception Test (TAT) and the Rorschach during the first 30 days of admission were included. However, it must be noted that all diagnoses were made independent of the TAT and Rorschach. The subject pool was then divided into two groups, mutilating Borderlines and non-mutilating Borderlines, based on behavioral records reviewed by a board certified psychologist. This categorization took place before the review of the TAT and Rorschach data. The facility’s research staff then randomly selected forty subjects from both the mutilating Borderline sample and non-mutilating Borderline sample to be included in this study.

The hospital executive committee granted the researcher use of appropriate hospital data. The researcher agreed with the executive committee to keep all patient materials confidential. To further ensure patient confidentiality, patient names were removed from the data by the hospital staff before this researcher reviewed the data for further inclusion in this study. In addition, staff members treating patients were unaware of this project and the use of patient data. Patients gave informed consent to participate. Patients were also informed that their names would not be attached to any research projects.

The final sample consisted of 93 adult female inpatients with a mean age of 29.10 years ($SD=9.06$) at admission. The mean years of education was 14.76 ($SD=2.37$). The mean Full Scale Intelligence Quotient for the entire sample was 106.42 ($SD=14.3$, $N=79$). Regarding marital status, 33.3% were single, 55.9% were married, and 10.8% were divorced.
Instruments

Epigenetic Assessment Rating Scale (EARS)

Wilson's Epigenetic Rating Scale (EARS) was used to assess both ego mastery and object mastery. The EARS scoring system is designed to measure affect, object relations, and ego characteristics based on responses from TAT narratives. The EARS rates 10 psychological dimensions along five epigenetic levels of personality organization. The 10 psychological dimensions are: affect tolerance, affect expression, personal agency, centration-decentration, threats to the self, defenses/defensive operation, empathy, use of an object, adaptive needs, and temporality. Four of the dimensions make up the Ego cluster: defenses, temporality, adaptive needs, and personal agency. Three other dimensions make up the object relations cluster: threats to the self, centration-decentration, and use of an object. The remaining three dimensions make up the affect cluster which is not used in this study.

The five epigenetic levels of the EARS are hierarchically ordered from one (most primitive or unhealthy) to five (most developed or healthy). The EARS is applied to TAT narratives to obtain epigenetic levels on desired dimensions or clusters depending on the nature of a study. The EARS will be applied to cards #1 and #13MF of patients' TAT responses to obtain epigenetic levels on six desired dimensions used to compute Object Mastery and Ego Mastery scores. The dimensions of "Threats to the Self" and "Use of an Object" were used to compute Object Mastery. The dimensions of "Personal Agency," "Defensive Operation," "Adaptive Needs," and "Temporality" were used to compute Ego Mastery. Cards #1 and #13MF of the TAT are used for all six specified
EARS dimensions because of their known ability to tap high and low arousal levels (Wilson, Pasik, & Kuras, 1989). Their combination has been shown to correlate well with a person’s overall epigenetic functioning. The Ego Mastery score was determined by averaging the ego modal scores for the four ego dimensions across two arousal cards (cards #1 and #13MF) to determine a subject’s quality of regression. The Object Mastery score was determined by averaging the object modal scores for the two specified ego dimensions across the same two arousal cards. Expert Epigenetic Assessment Rating Scale (EARS) raters applied the EARS to cards #1 and #13MF of each patient’s TAT data to determine the relevant EARS scores. Raters were blind to the hypotheses of the study.
Reliability. Since the EARS is a subjective measure, the author established inter-rater reliability for the instrument. Originally, inter-rater reliability was obtained by training five graduate students (four doctoral level students and one masters level student) in the application of the EARS. Following training, these students scored the 10 EARS dimensions on 14 of the same TAT narratives. Raters were not aware of demographical or diagnostic information of subjects. These raters were considered expert raters once they had 90% exact matches or 90% ratings within one scale point of Wilson’s ratings. Four additional graduate students were trained to rate the EARS and included in further inter-rater reliability trials. Wilson et al. (1989) report Pearson Product Moment Correlations between .85 and .92 and Spearman Brown Coefficient of Reliability scores averaging pairwise correlations of .88.

Validity. EARS validity was also reported in the Wilson et al. (1989) publication. To demonstrate the independence of the EARS dimensions, data from three studies totaling 80 subjects was aggregated and analyzed for factorial validity. A principle components analysis with a varimax rotation was conducted on 20 variables, 10 dimensions crossed with two arousal levels. All of the 10 dimensions loaded on one component with statistical loadings between .53 and .87 demonstrating relative independence of each dimension on a rotated component (Wilson, et al., 1989). According to Wilson et al. (1989), the factor analysis results demonstrate 20 independent psychological EARS dimensions. Wilson further examined the correlations across arousal levels to demonstrate the independence of 10 psychological EARS dimensions with varying degrees of functioning.
Defense Mechanisms Manual (DMM)

Cramer's Defense Mechanisms Manual (DMM) was applied to each patient's TAT narratives to determine necessary DMM scores. The DMM scoring system is designed to assess the presence of three defense mechanisms: denial, projection, and identification. A set criteria is used to code the presence of the three defenses for each TAT card response.

Each defense has seven scorable categories. These categories (represent) different (components) of that defense (Cramer, 1999a; Cramer, 2000; Cramer & Blatt, 1990). The three defense scores are determined by the number of times each component is used in a TAT response. These scores are then summed across stories to come up with an overall defense score. Thus, four scores are available: (a) use of denial, (b) use of projection, (c) use of identification, and (d) total defense use (Cramer, 2000; Cramer & Blatt, 1990).

The DMM was chosen because of its known ability to accurately identify primitive defense mechanisms often present in Borderline pathology (Cramer, 1999b). It is used as a secondary defense measure to ensure support for any findings regarding ego functioning between the designated groups and to provide cross validation with Wilson's EARS instrument. Because the other three measures in this study are continuous, this researcher elected to formulate the DMM total as a continuous variable by hierarchically organizing Cramer's DMM defenses along a continuum of most primitive to most mature based on psychoanalytic principles. Denial was considered most primitive and multiplied by 3, projection total was multiplied by 2, and idealization total was
multiplied by 1. It must be noted that no studies to date have used the DMM as a continuous variable.

For the purposes of this study, the DMM will be applied to cards #1 and #13MF, the same cards used to score ego and object relations functioning by the EARS. The same cards will be scored for both instruments for the purposes of consistency and cross-validation. As Hibbard and Porcerelli (1998) have noted, integrating the use of the DMM with other empirically validated TAT coding instruments is needed.

**Mutuality of Autonomy Scale (MOAS)**

Exner's (1993) administration and scoring of the Rorschach inkblots was applied to all subjects' Rorschach data. The Mutuality of Autonomy Scale (MOAS) (Urist, 1977; Urist & Schill, 1982), a hierarchically ordered scale, was used to assess the degree of differentiation in self-other representations on the Rorschach. The scale evaluates interpersonal functioning by rating human, animal, and inanimate relationships in a Rorschach protocol on a continuum. A subject's scores, or level of differentiation, ranges from scale point 1 (structurally differentiated representations) to point 7 (undifferentiated representations). Scale point 1, representing the most adaptive interpersonal functioning, corresponds to reciprocal acknowledgment themes; whereas, scale point 7, representing the least adaptive interpersonal functioning, corresponds to themes of severe destruction (Blatt, Tuber, and Auerbach, 1990). The scale provides a single highest object-relations score and a single lowest object-relations score, as well as a mean object relations score, thereby allowing a researcher to capture both the mode and range of a subject's object relations functioning. This study used a composite score of
high level pathological scores (Path score) for its known ability to measure pathological
object relations (Berg, Packer, & Nunno, 1993; Fowler, Hilsenroth, & Nolan, 2000).

The Urist Path score is used as a secondary measure for the object relations
variable to support and cross validate differences between the two groups found using
Wilson’s EARS Object Mastery score.

Reliability. Due to the nature of the MOAS, reliability is best presented in
interrater form. Tuber (1989) reports reliability of the MOAS in inter-rater form to be
between 70 and 90% for exact scoring agreements and 85% for scoring agreements
within 1 scale point of independent raters. Blatt, Tuber, and Auerbach (1990) outline
studies demonstrating significant correlations between MOAS ratings and psychiatric
symptomatology, interpersonal behavior in both clinical and nonclinical contexts, and
ratings of social interactions by ward staff.

Statistical Procedures and Design

In this study, there is one independent variable with two levels: self-mutilating
Borderline Personality Disorder patients and non-mutilating Borderline Personality
Disorder patients. All other variables are the dependent variables: EARS Object
Mastery, EARS Ego Mastery, DMM, and MOAS-PATH. Because high intercorrelations
are expected between the EARS Ego Mastery and the DMM and between the EARS
Object Mastery and the MOAS, MANOVA is not the best statistical procedure for this
data. While a MANOVA can identify significance among the groups, it cannot locate
where the differences occur because of the likely high correlation between the dependent
variables. Therefore, a repeated measures ANOVA will be used to statistically evaluate
the differences between the two groups. A repeated measures ANOVA is the most appropriate method of data analysis for this study because there are multiple measures of two different constructs and a grouping variable. In addition, the variables representing the repeated measure are scale variables.

In addition to evaluating differences between groups, the repeated measures ANOVA will inherently assess whether the EARS Ego Mastery and the DMM measure the same construct and whether the EARS Object Mastery and the MAOS-Path measure the same construct.

The global hypothesis for the study is that there are ego and object relations differences between self-mutilating Borderline Personality Disorder patients and non-mutilating Borderline Personality Disorder patients, with higher ego and object relations functioning being seen in the non-mutilating group. The researcher's main hypothesis, however, is that non-mutilating Borderline Personality Disorder patients are expected to exhibit more EARS Ego Mastery and EARS Object Mastery than mutilating Borderline Personality Disorder patients, as evidenced by a subject's EARS Ego Mastery scores under a combination of low and high arousal conditions and EARS Object Mastery scores under a combination of low and high arousal conditions.

Specific hypotheses are as follows:

#1 Non-mutilating Borderline Personality Disorder patients will score higher than self-mutilating Borderline Personality Disorder patients on EARS Ego Mastery.

#2 Non-mutilating Borderline Personality Disorder patients will score higher than self-mutilating Borderline Personality Disorder patients on the DMM.
#3 Non-mutilating Borderline Personality Disorder patients will score higher than self-mutilating Borderline Personality Disorder patients on EARS Object Mastery.

#4 Non-mutilating Borderline Personality Disorder patients will score higher than self-mutilating Borderline Personality Disorder patients on the MOAS-Path.

#5 Non-mutilating Borderline Personality Disorder patients will score higher than self-mutilating Borderline Personality Disorder patients on Ego Mastery and Object Mastery simultaneously.
Chapter IV

ANALYSIS OF THE DATA

Before running a repeated measures ANOVA, four statistical assumptions must be met. First, there must be independence between the groups. This study meets that assumption. A subject cannot be both a mutilator and a non-mutilator. A note about the coding of the grouping variable is necessary here. Patients who had never mutilated or mutilated only one time, were identified as non-mutilators. Patients who had mutilated themselves more than one time, were classified as mutilators. Second, there must be homogeneity of variances or equal variances between the groups. Statistical tests are robust to this if the subject numbers between groups are approximately equal. Table 1 shows the distribution of group frequencies.

Table 1

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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<td>Mutilator</td>
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<td>48.4</td>
<td>48.4</td>
<td>48.4</td>
</tr>
<tr>
<td>Non-mutilator</td>
<td>48</td>
<td>51.6</td>
<td>51.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
In this study, the number of mutilators is approximately equal to the number of non-mutilators meeting the assumption of homogeneity of variances.

Third, the assumption of normality must be met. In other words, variables must approximate a normal distribution. Tables 2 through 5 examine this assumption for the variables in this study.

Table 2

<table>
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<tr>
<th>MAO Score</th>
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<th>Valid Percent</th>
<th>Cumulative Percent</th>
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<td>29.0</td>
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<td>1.00</td>
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<td>16.1</td>
<td>45.2</td>
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<td>20.4</td>
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<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>93</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Although the distribution of scores for the MOAS are slightly skewed, this is compensated for by the relatively large sample size (n=93) in this study.

Table 3  

<table>
<thead>
<tr>
<th>Score</th>
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<td>50.0</td>
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<tr>
<td>4.00</td>
<td>4</td>
<td>4.3</td>
<td>4.5</td>
<td>54.5</td>
</tr>
<tr>
<td>5.00</td>
<td>5</td>
<td>5.4</td>
<td>5.7</td>
<td>60.2</td>
</tr>
<tr>
<td>6.00</td>
<td>4</td>
<td>4.3</td>
<td>4.5</td>
<td>64.8</td>
</tr>
<tr>
<td>7.00</td>
<td>2</td>
<td>2.2</td>
<td>2.3</td>
<td>67.0</td>
</tr>
<tr>
<td>8.00</td>
<td>7</td>
<td>7.5</td>
<td>8.0</td>
<td>75.0</td>
</tr>
<tr>
<td>9.00</td>
<td>4</td>
<td>4.3</td>
<td>4.5</td>
<td>79.5</td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th>Time</th>
<th>DMM</th>
<th>MOAS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.00</td>
<td>3</td>
<td>3.2</td>
<td>83.6</td>
</tr>
<tr>
<td>12.00</td>
<td>3</td>
<td>3.2</td>
<td>86.4</td>
</tr>
<tr>
<td>13.00</td>
<td>2</td>
<td>2.2</td>
<td>88.6</td>
</tr>
<tr>
<td>14.00</td>
<td>1</td>
<td>1.1</td>
<td>89.8</td>
</tr>
<tr>
<td>15.00</td>
<td>2</td>
<td>2.2</td>
<td>92.0</td>
</tr>
<tr>
<td>16.00</td>
<td>2</td>
<td>2.2</td>
<td>94.3</td>
</tr>
<tr>
<td>19.00</td>
<td>1</td>
<td>1.1</td>
<td>95.5</td>
</tr>
<tr>
<td>24.00</td>
<td>1</td>
<td>1.1</td>
<td>96.6</td>
</tr>
<tr>
<td>25.00</td>
<td>1</td>
<td>1.1</td>
<td>97.7</td>
</tr>
<tr>
<td>27.00</td>
<td>1</td>
<td>1.1</td>
<td>98.9</td>
</tr>
<tr>
<td>38.00</td>
<td>1</td>
<td>1.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>94.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The DMM scores are also slightly skewed but less so than the MOAS scores.

Again, the relatively large sample size in this study should compensate for the slightly skewed distribution.
## Table 4

### Distribution of Scores for the EARS Ego Mastery

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.38</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>1.63</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>2.2</td>
</tr>
<tr>
<td>1.75</td>
<td>3</td>
<td>3.2</td>
<td>3.3</td>
<td>5.4</td>
</tr>
<tr>
<td>1.88</td>
<td>2</td>
<td>2.2</td>
<td>2.2</td>
<td>7.6</td>
</tr>
<tr>
<td>2.00</td>
<td>6</td>
<td>6.5</td>
<td>6.5</td>
<td>14.1</td>
</tr>
<tr>
<td>2.13</td>
<td>3</td>
<td>3.2</td>
<td>3.3</td>
<td>5.4</td>
</tr>
<tr>
<td>2.25</td>
<td>9</td>
<td>9.7</td>
<td>9.8</td>
<td>27.2</td>
</tr>
<tr>
<td>2.38</td>
<td>7</td>
<td>7.5</td>
<td>7.6</td>
<td>34.8</td>
</tr>
<tr>
<td>2.50</td>
<td>8</td>
<td>8.6</td>
<td>8.7</td>
<td>43.5</td>
</tr>
<tr>
<td>2.63</td>
<td>11</td>
<td>11.8</td>
<td>12.0</td>
<td>55.4</td>
</tr>
<tr>
<td>2.75</td>
<td>10</td>
<td>10.8</td>
<td>10.9</td>
<td>66.3</td>
</tr>
<tr>
<td>2.88</td>
<td>5</td>
<td>5.4</td>
<td>5.4</td>
<td>71.7</td>
</tr>
<tr>
<td>3.00</td>
<td>7</td>
<td>7.5</td>
<td>7.6</td>
<td>79.3</td>
</tr>
<tr>
<td>3.13</td>
<td>5</td>
<td>5.4</td>
<td>5.4</td>
<td>84.8</td>
</tr>
<tr>
<td>3.25</td>
<td>4</td>
<td>4.3</td>
<td>4.3</td>
<td>89.1</td>
</tr>
</tbody>
</table>

(table continues)
Table 4 indicates that the EARS Ego Mastery scores appeared to approximate a normal distribution.

Table 5

**Distribution of Scores for the EARS Object Mastery**

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*(table continues)*
<table>
<thead>
<tr>
<th>Value</th>
<th>1</th>
<th>1.1</th>
<th>1.1</th>
<th>2.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.50</td>
<td>6</td>
<td>6.5</td>
<td>6.5</td>
<td>8.7</td>
</tr>
<tr>
<td>1.75</td>
<td>5</td>
<td>5.4</td>
<td>5.4</td>
<td>14.1</td>
</tr>
<tr>
<td>2.00</td>
<td>9</td>
<td>9.7</td>
<td>9.8</td>
<td>23.9</td>
</tr>
<tr>
<td>2.25</td>
<td>21</td>
<td>22.6</td>
<td>22.8</td>
<td>46.7</td>
</tr>
<tr>
<td>2.50</td>
<td>20</td>
<td>21.5</td>
<td>21.7</td>
<td>68.5</td>
</tr>
<tr>
<td>2.75</td>
<td>7</td>
<td>7.5</td>
<td>7.6</td>
<td>76.1</td>
</tr>
<tr>
<td>3.00</td>
<td>10</td>
<td>10.8</td>
<td>10.9</td>
<td>87.0</td>
</tr>
<tr>
<td>3.25</td>
<td>6</td>
<td>6.5</td>
<td>6.5</td>
<td>93.5</td>
</tr>
<tr>
<td>3.50</td>
<td>4</td>
<td>4.3</td>
<td>4.3</td>
<td>97.8</td>
</tr>
<tr>
<td>3.75</td>
<td>2</td>
<td>2.2</td>
<td>2.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>98.9</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Like the EARS Ego Mastery variable, the EARS Object Mastery variable appears to approximate a normal distribution.

Fourth, the assumption that the variables represent repeated measures and are continuous must be met. In this study, as mentioned in Chapter III, the EARS Ego Mastery and the DMM both measure defense use. Ego Mastery is a continuous variable.
The DMM as explained in Chapter III was converted to a continuous variable for the purposes of this study. The EARS Object Mastery and the MOAS both measure object relations or interpersonal functioning on a continuum.

With the four assumptions met, a repeated measures ANOVA was conducted on the data. The repeated measures ANOVA estimates marginal means for statistical tests. Because there are two measures for ego and two measures for object in this study, estimated means must be used for each construct. Tables 6 through 11 provide descriptive statistics. The standard error of the mean rather than the standard deviation is reported in these tables, because the means are estimated.

Table 6

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard Error</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutilator</td>
<td>3.350</td>
<td>.264</td>
<td>45</td>
</tr>
<tr>
<td>Non-mutilator</td>
<td>3.662</td>
<td>.253</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 6 indicates that the overall mean for non-mutilators was greater than the overall mean for mutilators when all measures were considered simultaneously. Table 7 addresses the means for the two factors in combination; that is, the means reflective of the two way interactions.
Table 7

Marginal Means for the Two Levels of Ego and the Two Levels of Object

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ego</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMM</td>
<td>4.491</td>
<td>.354</td>
</tr>
<tr>
<td>EARS Ego Mastery</td>
<td>2.521</td>
<td>.117</td>
</tr>
<tr>
<td>Object</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOAS-PATH</td>
<td>4.325</td>
<td>.374</td>
</tr>
<tr>
<td>EARS Object Mastery</td>
<td>2.687</td>
<td>.053</td>
</tr>
</tbody>
</table>

Table 7 shows that the mean for the DMM appears to be much higher than the mean for Ego Mastery across all subjects. It also indicates that the mean for the MAOS score is much higher than the mean for Object Mastery across all subjects.

Table 8

Means for Mutilators and Non-mutilators on Repeated Measures
<table>
<thead>
<tr>
<th>Group</th>
<th>Measure</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutilator</td>
<td>DMM</td>
<td>3.993</td>
<td>.512</td>
</tr>
<tr>
<td></td>
<td>Ego Mastery</td>
<td>2.708</td>
<td>.169</td>
</tr>
<tr>
<td>Non-mutilator</td>
<td>DMM</td>
<td>4.989</td>
<td>.489</td>
</tr>
<tr>
<td></td>
<td>Ego Mastery</td>
<td>2.334</td>
<td>.162</td>
</tr>
<tr>
<td>Mutilator</td>
<td>MOAS</td>
<td>4.095</td>
<td>.541</td>
</tr>
<tr>
<td></td>
<td>Object Mastery</td>
<td>2.606</td>
<td>.077</td>
</tr>
<tr>
<td>Non-mutilator</td>
<td>MOAS</td>
<td>4.554</td>
<td>.517</td>
</tr>
<tr>
<td></td>
<td>Object Mastery</td>
<td>2.769</td>
<td>.073</td>
</tr>
</tbody>
</table>

Table 9
Means Representing the Interaction of Ego and Object without Group

<table>
<thead>
<tr>
<th>Ego Measure</th>
<th>Object Measure</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMM</td>
<td>MOAS</td>
<td>6.32</td>
<td>.705</td>
</tr>
<tr>
<td></td>
<td>Object Mastery</td>
<td>2.66</td>
<td>.058</td>
</tr>
<tr>
<td>EARS Ego Mastery</td>
<td>MOAS</td>
<td>2.33</td>
<td>.235</td>
</tr>
<tr>
<td></td>
<td>Object Mastery</td>
<td>2.71</td>
<td>.062</td>
</tr>
</tbody>
</table>
Table 9 shows that the MOAS means for all subjects taken together is much higher than the means for Object Mastery when combined with the DMM; however, the MOAS means and Object Mastery means appear quite similar when combined with the EARS Ego Mastery. The three way interaction means are reported next (see Table 10).

Table 10

Means for Ego and Object Combinations for Each Level of Group

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure</th>
<th>Group</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMM</td>
<td>MOAS</td>
<td>Mutilator</td>
<td>5.357</td>
<td>1.020</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>7.283</td>
<td>.974</td>
</tr>
<tr>
<td>Object Mastery</td>
<td>Mutilator</td>
<td>2.628</td>
<td>.084</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>2.696</td>
<td>.080</td>
</tr>
<tr>
<td>Ego Mastery</td>
<td>MOAS</td>
<td>Mutilator</td>
<td>2.833</td>
<td>.340</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>1.826</td>
<td>.325</td>
</tr>
<tr>
<td>Object Mastery</td>
<td>Mutilator</td>
<td>2.583</td>
<td>.089</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>2.842</td>
<td>.085</td>
</tr>
</tbody>
</table>

The means for MOAS appear to be different than the means for Object Mastery for both mutilators and non-mutilators when paired with the DMM. The means for the MOAS are higher for mutilators and lower for non-mutilators when paired with Ego...
Mastery. Levene’s test for homogeneity of variance between groups on each repeated measure separately is reported in Table 11.

Table 11

<table>
<thead>
<tr>
<th>Measure</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMM</td>
<td>5.990</td>
<td>1</td>
<td>8</td>
<td>.016</td>
</tr>
<tr>
<td>EARS Ego Mastery</td>
<td>.449</td>
<td>1</td>
<td>8</td>
<td>.505</td>
</tr>
<tr>
<td>MOAS</td>
<td>.180</td>
<td>1</td>
<td>8</td>
<td>.673</td>
</tr>
<tr>
<td>EARS Object Mastery</td>
<td>.573</td>
<td>1</td>
<td>8</td>
<td>.451</td>
</tr>
</tbody>
</table>

The Levene’s Test for EARS Ego Mastery, MOAS, and EARS Object Mastery are non-significant (p > .05) which means that equal variances exist among the mutilator and non-mutilator groups. In other words, the assumption of equal variances has been met. The Levene’s Test for the DMM is significant which would indicate that the assumption of equal variances has been violated. This significance is not of concern because the sample sizes within groups are almost equal.

Table 12 compares the mutilator and non-mutilator groups on the average of all measures. This test of between-subjects effects was non-significant (p > .05). This does not support the hypothesis that there would be differences between the groups overall.
Table 12

**Overall Test of Between-Group Differences**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>2.127</td>
<td>1</td>
<td>2.127</td>
<td>.724</td>
<td>.397</td>
</tr>
<tr>
<td>Error</td>
<td>252.525</td>
<td>86</td>
<td>2.936</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13 shows the results of the omnibus test, sphericity assumed, for within-subjects effects.

Table 13

**Overall Test of Within-Group Differences**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ego</td>
<td>340.661</td>
<td>1</td>
<td>340.661</td>
<td>26.938</td>
<td>.000</td>
</tr>
<tr>
<td>Ego * Group</td>
<td>41.247</td>
<td>1</td>
<td>41.247</td>
<td>3.262</td>
<td>.074</td>
</tr>
</tbody>
</table>

(table continues)
Table 13 shows significant differences (p < .05) for Ego, Object, Ego by Object, and Ego by Object by Group. The significance regarding Ego implies that there are significant differences between the DMM and EARS Ego Mastery measures. This supports the hypothesis that there would be significant differences between the two measures of Ego. Likewise, there are significant differences between the MOAS and EARS Object Mastery measures. The Ego by Object significance indicates that there are significant differences between Ego and Object when one of the means for Ego is compared to one of the means for Object. The non-significant group by Ego and group by Object interactions indicates that there were no significant differences between the groups when only the Ego repeated measure was considered and also when only the Object repeated measure was considered. The Ego by Object by Group interaction was significant which implies that there are significant differences between the groups when certain Ego/Object combinations are considered. Table 14 reports the simple effects test results used to evaluate this significant three-way interaction.
Table 14

**Between Groups Differences for Specific Ego/Object Combinations**

<table>
<thead>
<tr>
<th>Ego Measure</th>
<th>Object Measure</th>
<th>Borderline Type 1</th>
<th>Borderline Type 2</th>
<th>Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMM</td>
<td>MOAS</td>
<td>Mutilator</td>
<td>Non-mutilator</td>
<td>1.410</td>
<td>.176</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>Mutilator</td>
<td>1.410</td>
<td>.176</td>
</tr>
<tr>
<td></td>
<td>Object Mastery</td>
<td>Mutilator</td>
<td>Non-mutilator</td>
<td>.116</td>
<td>.561</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>Mutilator</td>
<td>.116</td>
<td>.561</td>
</tr>
<tr>
<td>Ego Mastery</td>
<td>MOAS</td>
<td>Mutilator</td>
<td>Non-mutilator</td>
<td>.471</td>
<td>.035</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>Mutilator</td>
<td>.471</td>
<td>.035</td>
</tr>
<tr>
<td></td>
<td>Object Mastery</td>
<td>Mutilator</td>
<td>Non-mutilator</td>
<td>.123</td>
<td>.038</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-mutilator</td>
<td>Mutilator</td>
<td>.123</td>
<td>.038</td>
</tr>
</tbody>
</table>

*Results based on estimated marginal means.*

The results of the three-way interaction show that non-mutilators scored higher than mutilators on the EARS Ego Mastery and on the EARS Object Mastery combination. The results also show that mutilators scored higher than non-mutilators on the EARS Ego Mastery and EARS Object Mastery combination. These results support...
the hypothesis that there would be significant differences between groups for certain Object/Ego combinations.
Chapter V

DISCUSSION

The presence of the significant three-way interaction suggests that between group differences in this study depend on a combination of ego and object constructs rather than one or the other. In other words, there were significant differences between the groups for certain Ego/Object combinations. The significant difference between the groups on the EARS Ego Mastery and EARS Object Mastery combination supports two main tenets of this study: (a) Synthesizing Ego and Object structures is necessary for an understanding of Borderline pathology, and (b) The quality of Ego and Object regressions and progressions experienced on a regular basis are poorer for the self-mutilating Borderline Personality Disorder patients than for the non-mutilating Borderline Personality Disorder patients.

Because Object Mastery and Ego Mastery assess object representations and defensive structure under different arousal conditions, the data support the hypothesis that self-mutilating Borderline Personality Disorder patients are less able to tolerate stimulus changes and have less flexibility and fluidity in their interpersonal and adaptive functioning than do non-mutilating Borderline Personality Disorder patients. This study can only support this statement when both variables are considered simultaneously. Thus, self-mutilation is linked to a combination of the ego and object deficits that get expressed under different arousal conditions which was successfully demonstrated using Wilson’s Epigenetic Assessment Rating Scale (EARS). It must be noted, however, that
these theoretical positions are only significant when both the EARS Object Mastery and the EARS Ego Mastery are considered simultaneously.

The second Ego/Object combination that statistically differentiated between self-mutilating Borderline Personality Disorder patients and non-mutilating Borderline Personality Disorder patients was not anticipated. The results showed that self-mutilating Borderline Personality Disorder patients scored significantly higher than non-mutilating Borderline Personality Disorder patients on the combination of the MOAS-Path and the EARS Ego Mastery. This finding suggests that self-mutilators can be distinguished from non-mutilators when the EARS Ego Mastery and MAOS-Path are considered simultaneously. This is an interesting and unexpected phenomena because a higher Ego Mastery score suggests more advanced defensive functioning whereas a higher MOAS-Path score suggests more pathological object representations. While this finding is inexplicable without further empirical examination of the variables, it might indicate that self-mutilators react more positively to one projective stimuli, the Thematic Apperception Test, than they do to another stimuli, the Rorschach. As explained in Chapter III, the Ego Mastery Score is generated from the Thematic Apperception Test and the MOAS score is generated from the Rorschach. Another possible interpretation is that there is a specific aspect of Ego Mastery for which self-mutilating Borderline Personality Disorder patients do better and another aspect of Ego Mastery for which self-mutilating Borderline Personality Disorder patients do worse. Future studies need to examine these differences using specific dimensions associated with Ego Mastery separately to hopefully tease out this unexpected finding. Another possibility is that the
EARS Ego Mastery measures two different constructs which is only evident when paired with the MAOS-Path. Again, focusing on specific Ego Mastery dimensions might clarify these findings. And finally, it can be argued that because the MOAS-Path and the EARS Object Mastery scores were significantly different across groups, the MAOS-Path and EARS Object Mastery measure different constructs or possibly slightly different facets of the same construct (Object).

Although the DMM was not included in the statistically significant higher order interactions (three-way), there were significant differences between the DMM and the EARS Ego Mastery measures in general. This finding could be interpreted to mean that the DMM and the EARS Ego Mastery measure different constructs. It could also be interpreted that the DMM and the EARS Ego Mastery measure slightly different facets of the same construct (Ego). Clearly, the differences between the two measures is a possible avenue for future exploration. One particular avenue for future examination lies in the non-traditional use of the DMM as an aggregated continuous variable in this study. Using the DMM in this way may not be statistically valid or reliable, masking the contributions the DMM might make to discrimating between self-mutilating Borderline Personality Disorder patients and non-mutilating Borderline Personality Disorder patients.

Like the EARS Ego Mastery and DMM, the EARS Object Mastery and MOAS-Path were significantly different. One interpretation of these findings is that EARS Object Mastery and MOAS-Path are measuring different constructs or slightly different facets of the same construct. Specific dimensions associated with the EARS Object
Mastery score need to be examined with the MOAS-Path to determine the underlying differences in these measures.

A note about the significance for individual measures to discriminate between groups is important here. None of the four measures (Ego Mastery, Object Mastery, DMM, or MOAS-Path) alone, that is separately, significantly discriminated between self-mutilating Borderline Personality Disorder patients and non-mutilating Borderline Personality Disorder patients. Thus, neither the underlying defensive structure nor the underlying object structure alone tell us much about the differences between self-mutilating and non-mutilating Borderline Personality Disorder patients. This is consistent with the three way interaction findings mentioned previously. Thus, it is neither the defensive structure nor the object structure that influences a Borderline Personality Disorder patient to mutilate but rather certain combinations of defensive structure and object structure that affect a Borderline Personality Disorder patients desire to mutilate.

These findings raise the question about the magnitude of the contributions of each construct. If ego and object structures collectively determine mutilation as the results suggest, future research needs to address the relative magnitude of those constructs in affecting one’s desire to mutilate. Perhaps one construct has more weight in determining that desire than the other construct.

In addition, the findings raise the question about the relative strength of the instruments found to be involved in the three-way interaction in discriminating between the two groups. Perhaps Ego Mastery plays a small role in the Ego Mastery/MOAS-Path
combination that was found to discriminate between the groups. In addition, Ego Mastery
could also be make a small contribution to Ego Mastery/Object Mastery combination that
was found to discriminate between the groups. Thus, it is not clear what relative
contributions each instrument makes in the statistically significant Ego/Object
combinations.

There are several empirical limitations that limit generalizability of the above
findings. First, a control group was not used. Second, even if a control group had been
used, genetic and chemical correlates of self-mutilation could have affected results.
Future studies, if possible, need to address psychodynamic and chemical aspects of
regression simultaneously. And finally, the extremely small subject pool used to assess
interrater reliability for the EARS limits generalizability. The correlations between the
expert EARS raters for both Object Mastery and Ego Mastery were too small (N=9) to
draw conclusions. A sample size of 30 would give a more stable estimate of interrater
reliability for EARS measures in this study.
References


Appendix A

Thematic Apperception Narratives for a Mutilating

Borderline Personality Disorder Subject
Non-arousal Card

[What might be happening in this picture?] Well, the little boy is thinking, trying to figure out what to do with the instrument and whether to play it. It also looks like a gun to me in the picture. So he's thinking about it. I don't know, the picture has a dark feeling about it to me. "The light—the shadow. (Inaudible) contemplating—I guess just about contemplation. [What led up to the picture?] I don't know, maybe he doesn't know how to play. Maybe he's never learned, nobody taught him. [What was the last thing you said?] No one showed him. His face looks fairly peaceful to me, however, the violin keeps turning into a gun, to me. [What might the outcome be?] I don't know (muffled speech). [I'm sorry?] It doesn't look like he's going to play it.

Arousal Card

(mumbles) [Mm?] That's a neat picture (picture hanging in office). She looks dead and he looks very sad. He also could be tired, I guess. She could be sleeping. I don't know, he looks more tired than anything, I guess. He's thinking, "Where's my coffee?" She doesn't look like she's feeling anything. I don't know. I don't have anything else to say about this one.
Appendix B

Thematic Apperception Narratives for a Non-mutilating

Borderline Personality Disorder Subject
Non-arousal Card

Do I have to tell you when I’m starting or can I just start? (E: You can just start.)

Okay. Brian’s looking at his violin, frustrated once again that he cannot play the song that he was able to play before. He’s practiced and he’s practiced and, and it happened with his instructor, you know, he practiced with him and he was able to play. He went on to play for the concert, he... came back... and realized now... that he doesn’t know how to play. This is a stupid story; can I stop it in the middle? Am I allowed to do that? (E: Yeah, you can say whatever you want.) Okay. Dumb story. I’d like to change the story. Can I change it in mid? (E: Yeah, just tell me the story.) Um... Adam tried to play the song on the violin once again and this time realized that he just couldn’t do it. He had worked with his instructor now for over three weeks on the same song and just couldn’t get how to play. He had practiced and he had practiced but it just somehow didn’t work, so now as Brian sat looking at his violin he thought, “What do I do? What’s my next move, should I continue to play? I’m very frustrated, I don’t know if I can play anymore songs.” And he sat and he thought and he thought and he realized that he had played other songs before; he had been frustrated before but had, through practice and through patience, ended up playing the song and playing it well. So he decided that he would take the violin, he would continue to play, he would continue to get help and... he did and he went on to play a concert for himself and for his family.

Arousal Card

Dead-no. It seems like she’s getting sicker and sicker every day. I thought it was supposed to get better. I thought the doctor said that she was supposed to get better.
She’s not, though. What will I do without her? I sit her, I come into the room and I look at her, so beautiful lying there. She was so beautiful before all this. She had such life and energy and now what will I do? I have to hold strong. I have to keep myself together because she’s not dead yet and whatever I can do to help make her better, I will. So I’m going to... gonna pull myself up, I’m gonna take charge and I’m gonna do my best to make everything okay.