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Differentiating Adolescents With Borderline Personality Disorder From Normal Adolescents and Adolescents With Other Disorders

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Differentiating Adolescents With Borderline Personality Disorder From Normal Adolescents and Adolescents With Other Disorders

by

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This dissertation is dedicated to my Swedish grandmother, who was a

foster child, and to my grandfather, who loved her;

and to my children, parents, sister, and

step-brother who continue to weave

the transgenerational web.

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Differentiating Adolescents With Borderline Personality Disorder From Normal Adolescents and Adolescents With Other Disorders

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This research investigates whether adolescents with Borderline Personality Disorder (BPD) can be reliably differentiated from normal and other-disordered adolescents. Psychoanalytic theory describes borderline psychopathology as deriving from difficulties in the separation/individuation phase of early development. Mahler (1946) portrays the rapprochement subphase of this period as a time when the child is vulnerable to the nascent of personality disorders. Blos (1967) elaborated this theory positing adolescence as a "second individuation" where earlier separation/individuation difficulties reemerge. Difficulties in the rapprochement stage make the second individuation problematic, leaving the adolescent at risk for borderline pathology.

Westen (2003) states that research on BPD in adolescence remains in its infancy. Studies conducted in the 1990's revealed BPD can be reliably diagnosed in adolescents (Block et al., 1991; Westen et al., 1990). The validity of the concept in this age group remains to be shown, however. "The overlap with other disorders, the difficulty with diagnosing or differentiating borderline symptoms in the setting of continuing adolescent development, and the lack, as yet, of outcome data add to the conceptual confusion" (James et al., 1996).

The most recognized theory on BPD, developed by Kernberg (1977), suggests individuals with BPD can be distinguished by their 1) object relations, 2) primitive defensive operations, and 3) reality testing. This study hypothesized that Kernberg's characteristics, and individuation difficulties highlighted by Blos, are more problematic in adolescent girls who meet the criteria for BPD than normal or other-disordered adolescent girls.

The measures in this study—DIB-R, Splitting Index, Separation Individuation Questionnaire, BORRTI--measure BPD, splitting, separation/individuation, and object relations and reality testing, respectively.

Participants were drawn from a clinical setting, foster care, or the normal population. The presence of borderline psychopathology was ascertained by the DIB-R (Zanarini, et al., 1989), thus establishing three groups composed of 21 borderline, 17 other-disordered, and 33 non-clinical adolescents. Each participant was asked to complete the three

aforementioned measures. As predicted, significantly more borderline participants demonstrated more severe difficulties than the other groups.

These results allow for greater diagnostic clarity and outline specific areas of focus for researchers and practitioners such that earlier recovery might be achieved.

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CHAPTER I

INTRODUCTION

Borderline Personality Disorder (BPD) is a serious disorder that causes a great deal of suffering for those afflicted. It accounts for up to 60 percent of personality disorders among clinical populations and therefore is the most frequently occurring (American Psychiatric Association, 1994). The essential feature of BPD is a pervasive pattern of instability in interpersonal relationships, and self-image, as well as affects marked by impulsivity that begins by early adulthood and is present in a variety of contexts. Developmental history of persons with BPD frequently includes early childhood separations, disturbed parental involvement, and childhood experiences of abuse. Completed suicide occurs in 8-10 percent of these individuals, and self-mutilative acts (e.g. cutting or burning) and suicide threats and attempts are very common (American Psychiatric Association, 2000). As the long and varied list of symptoms suggests, individuals with BPD use more kinds of psychiatric medications and psychotherapy than do individuals with other disorders (Work Group on BPD, Harvard Mental Health Letter, 2002). Moreover, this is one of the most complicated disorders to understand and one of the most difficult to treat, which leads to the continuous need for ongoing research.

Although BPD has been determined to exist in adults, there is still much controversy over its diagnosability, prevalence, and treatment in children and adolescents. In 1990, Westen, et al. pointed out that no empirical studies had

been conducted on adolescents with BPD. Several studies followed showing that BPD can be reliably diagnosed in adolescents (Block et al., 1991; Westen et al., 1990); however, the validity of the concept in this age group has yet to be demonstrated. The overlap with other disorders, the problems with diagnosing or differentiating borderline symptoms in the setting of continuing adolescent development, and the lack of outcome data add to the conceptual confusion (James et al., 1996). Furthermore, in an article published just last year, Westen (2003) stated that research on BPD in adolescents and children remains in its infancy.

In recognition of the need for better understanding of BPD in adolescents, this study hypothesizes that adolescents with borderline personality disorder will differ from adolescents with other disorders and adolescents drawn from a normal population. My primary goal is to evaluate the extent to which disturbed object relations, splitting, and separation and individuation difficulties distinguish adolescents with BPD from normal and non-borderline adolescents. Second, I would like to provide further validation for the measures used in this study; and third, lend empirical support to several theories on the etiology of BPD.

The clinical subjects for this study will be children who have been taken away from their families by a child protection agency. To date, very little research has been conducted on children and adolescents who have this experience in common because their identity is protected under the law (Paris, 2003). Tragic histories coupled with a lack of support or any foundation make

this one of the most at-risk groups of children. This study may therefore help to explain how the experience of abuse and neglect help mold the personality of adolescence.

Demonstrating that the characteristics of splitting, separation and individuation difficulties, along with poor object relations and reality testing exist to a greater degree in adolescents with BPD will allow for more diagnostic certainty. In addition it will clarify more specific areas of treatment for the clinician such that earlier recovery might be achieved. Earlier recognition and intervention, as well as a more sophisticated/broader understanding of etiology, could decrease the number of individuals who carry this disorder into adulthood. Much suffering could thus be alleviated and strains on society's resources lessened.

In order to contextualize the question of adolescents with BPD, this study begins by describing a number of theories that contribute to a multifaceted understanding of borderline personality disorder. The primary theories discussed are those of Mahler, Blos, and Kernberg. I will also incorporate newer research and theories that have added to these conceptualizations and thereby enhanced our understanding of BPD in recent years.

Mahler (1971) and Blos (1967) focused on the separation process in early development (18-36 months) and what effect it may have on later adolescent identity development. They theorize that persons with BPD experience difficulties during the early separation stage that make the later critical period of

separation in adolescence extremely difficult. Adolescents with BPD are therefore likely to manifest problems in separation and individuation to a much greater degree than are normal adolescents or adolescents with other disorders.

Moreover, Kernberg (1977) states that adolescents with BPD can be distinguished by 1) their level of identity diffusion versus identity integration and the related overall quality of object relations, 2) a constellation of primitive versus advanced defensive operations, and 3) reality testing. These three characteristics, and the separation difficulties highlighted by Blos, are captured by the three independent measures used in the study: the Bell Object Relations and Reality Testing Inventory, the Splitting Index, and the Separation Individuation Inventory.

In this study the borderline and other disordered groups were sampled from residential treatment centers and foster care. The normal group was obtained from a high school. The adolescents were all girls between the ages of 13 to 18 years of age. They were all administered the Diagnostic Interview for Borderlines, Revised, and the three measures previously mentioned. The groups were compared to each other according to the different dimensions tested by the measures to see if there were significant differences.

The next chapter provides a more thorough discussion of the literature on borderline personality disorder, adolescent development, and defense mechanisms, especially splitting. Chapter III describes the subjects, the instruments, procedures, and statistical methodology followed in this research.

Chapter IV reports the results of the analyses carried out in this investigation. Chapter V discusses the implications of this study, including the degree to which these measures can be used to differentiate borderline adolescents from other adolescents and how well the results lend empirical support to the theories Kernberg, Blos, and Mahler. Chapter V also addressed the limitations of the study, suggestions for future research, and implications for clinical practice.

CHAPTER II

REVIEW OF THE LITERATURE

Borderline Personality Disorder

Borderline Personality Disorder is the most widely studied and often diagnosed personality disorder (Meissner, 1992; Widiger & Trull, 1993). It is considered to be one of the three most severe personality disorders and involves advanced and potentially serious levels of maladaptive personality functioning (DSM-IV, American Psychiatric Association, 1994; Millon, 1981). Community prevalence estimates of the disorder range from 1 to 2% (American Psychiatric Association, 2000; Trull et al., 2001) to up to 10% of psychiatric outpatients and 20% of inpatients (Torgerson et al., 2001; Swartz et al., 1990; Widiger et al., 1991). Of perhaps greatest concern is the high incidence of suicide and self-mutilating behavior among persons diagnosed with BPD: 70 to 75% have a history of at least one parasuicidal act and 5 to 10% eventually commit suicide (Linehan & Kehrer, 1993). As the long and varied list of symptoms suggests, these individuals use more mental health resources (medications and psychotherapy) than any other group (Work Group on BPD, Harvard Mental Health Letter, 2002). Moreover, BPD is one of the most complicated disorders to understand and one of the most difficult to treat, which leads to the continuous pursuit of understanding and the ongoing need for research.

Although the concept “borderline” has been utilized since the late 1930s (Stern, 1938), BDP did not become a formal diagnosis until 1980, with the

publication of the DSM-III (1980). The term was originally used to describe syndromes that fell somewhere on the vast "border" between neurosis and psychosis. The original conceptualization has since evolved as advancements in theory and practice have brought about a greater understanding of etiology, symptoms, and treatment. The current literature is vast and there are many theories attempting to explain the complexity of BPD.

Borderline Personality Disorder in Adolescence Prior to the publication of the DSM III (1980), there was considerable debate concerning whether or not BPD disorder should be included in the section called "Disorders Usually First Diagnosed in Infancy, Childhood or Adolescence." The symptoms can be present in childhood and adolescence but are infrequently diagnosed during these periods. Since BPD is classified as a personality disorder, it is not usually diagnosed until adolescence or early adulthood when the individual is expected to have formed a more stable identity.

The DSM (1994) discourages the early diagnosis of personality disorders. According to the latest revision, DSM-IV-TR,

> Personality disorder categories may be applied to children and adolescents in those relatively unusual instances in which the individual's maladaptive personality traits appear to be pervasive, persistent, and unlikely to be limited to a particular developmental stage or an episode of an Axis I disorder. It should be recognized that the traits of a personality disorder that appear in childhood will often not persist unchanged into adult life. To diagnose a personality disorder in an individual under 18 years, the features must have been present for at least one year. The one exception to this is antisocial personality disorder, which cannot be diagnosed in individuals under the age of 18 years (p. 687).

Prior to this latest version of the DSM, which obviously encourages a more conservative approach to diagnosis of personality disorder disorders in adolescence, the diagnosis was made more frequently, although with reticence. Part of the reason for this may be the system of managed care that has arisen during the past 20 years.

The DSM-III-R (1987) included the diagnosis "Identity Disorder" in an attempt to differentiate symptoms that are similar, but less severe, than those for BPD. This change created the possibility that the Identity Disorder category could precipitate earlier intervention. This category was later left out of the DSM-IV, however, because it was considered to be too vague and because the criteria were almost identical to the symptoms of a difficult adolescent transition into adulthood. The DSM-IV therefore included a category called "Identity Problem," in the section "Other Conditions That May Be a Focus of Clinical Attention." According to the DSM-IV, "Borderline Personality Disorder should be distinguished from Identity Problem, which is reserved for identity concerns related to a developmental phase (e.g., adolescence) and does not qualify as a mental disorder" (p. 654). Some researchers (Cohen et al., 1987; Lincoln et al., 1998) have suggested avoiding the term borderline entirely in childhood and replacing it with the more descriptive construct of “multiple complex developmental disorder.” This terminology emphasizes the presence of multiple

symptom dimensions, which are to a great extent what create the likelihood that this disorder will manifest itself in adolescence and adulthood.

Some studies have found that the childhood manifestation of BPD symptoms do not necessarily predict BPD in adulthood (Greenman et al., 1986; Lofgren et al, 1991), while the adolescent manifestation often does (Esman, 1989; Garnet et al., 1994). If, as Ludolph et al., state (1990), adult criteria can be used to distinguish borderline adolescents, then these criteria can be recognized and the adolescent subject treated, whether or not a formal diagnosis is made. If treatment begins early, there may be more likelihood that the subject will receive the help he or she needs before the conditions stabilizes. There are, of course, no guarantees. Diagnosing is problematic in that the label is stigmatizing and managed care companies hesitate to accept BPD as a “covered” condition. Therefore, the debate over whether a separate, formal diagnosis should exist for children and adolescents continues (Cicchetti & Olsen, 1990).

Adolescence is a likely period for the emergence of borderline psychopathology in particular, because of the consolidation of personality structure and the salience of concerns about identity and individuation that normally occur during this time. It is therefore important to try to understand exactly what stressors cause the manifestation of BPD in adolescence and which adolescents are particularly vulnerable. Adolescents with diffuse identity structures who use splitting as a defense mechanism seem particularly

vulnerable (Kernberg, 1978), especially those individuals who have abuse and neglect in their history.

Adolescence is widely recognized as a particularly challenging time in an individual's development (Blos, 1962, 1967, 1968; Erickson, 1959; Block et al., 1991). This is primarily because of the developmental tasks to be resolved before an individual is able to assume the responsibilities of adulthood. Without both a supportive environment and a relatively stable sense of identity, vulnerable individuals may become susceptible to the manifestation of personality disorders. Many developmental pathways lead to such vulnerabilities, and these pathways are often difficult to trace. This has resulted in many conflicting theories and little sound empirical research regarding the etiology of the personality disorders. However, it is clear that personality patterns become increasingly more fixed as the individual reaches adolescence and adulthood (DSM-IV, 1994), which highlights the importance of addressing personality problems as early as possible.

Theories on the Etiology of BPD

This section will consider some of the more prominent theories of the etiology of BPD, beginning with the pioneer in the field and ending with some of the more current theorists. While early researchers focused on the object relations intrapsychic model of development, later work moved toward biosocial theory as the grounding point for possible etiology. Finally, Zanarini et al. and Millon take into account the social and cultural factors involved. Although the

later approaches do consider environmental factors more broadly, they still essentially support the more classical object relations theories of Kernberg, Mahler and Blos.

Otto Kernberg has been writing about BPD since the 1960s and is credited with having been the first to articulate a coherent theory of BPD. For many years, he was the person most commonly associated with the borderline concept and his conceptualization continues to have influence on more current formulations.

Kernberg argues that the roots of BPD lie in a developmental failure during the pre-oedipal years (Kernberg, 1979). This failure can result from both environmental and genetic factors and results in an inability to integrate positive (involving pleasurable, libidinal feelings) and negative object representations (involving unmodulated, aggressive feelings) of self and others in order to achieve libidinal object constancy (the ability to love someone when he or she is not currently gratifying). This need to keep good and bad object representations apart, or splitting, leads to difficulties in creating stable and trusting relationships that are meaningful and satisfying. The resulting fluctuations in interpersonal behavior and the concomitant thoughts and feelings of either idealization or devaluation render more genuine relationships difficult if not impossible. With this in mind, Kernberg emphasizes understanding and treating the borderline in terms of the defensive splitting and identity diffusion that persist after developmental failure during the pre-oedipal stage.

Kernberg (1985) claims that the diagnostic elements of Borderline Personality Organization are: “anxiety, polysymptomatic neurosis, polymorphous perverse sexual trends, ‘classical’ prepsychotic personality structures, impulse neurosis and addictions, and lower level character disorders.” Structural elements consist of “nonspecific manifestations of ego weakness, shift toward primary process thinking, specific defensive operations at the level of borderline personality organization, and pathology of internalized object relations” (p. iv).

Kernberg (1985) also states that identity diffusion is an important component of what constitutes borderline personality organization, namely the “lack of an integrated self concept and an integrated and stable concept of total objects in relationship to the self” (p. 39). Healthy adolescent identity development is characterized by the gradual consolidation of identity structure into a coherent self. The primitive defense mechanism of splitting, it is theorized, is the primary mechanism that keeps the person from becoming more integrated in BPD, whereas in normal adolescence the use of this defense decreases as the adolescent matures into a healthy adult.

Mahler’s widely accepted model for child development can be used to explain Kernberg's object relations model. She postulates that from about 18 months to 36 months, the child goes through a stage of separation and individuation from his or her primary caretakers. A subphase of this stage is the rapproachment process, where the child approaches and recedes from the caretaker in order to gain the autonomy and capability necessary for further

development. “Normal separation-individuation is the first crucial prerequisite for the development and maintenance of the sense of identity” (Mahler, 1979, p.5). It is the role of the caretakers to provide an environment that supports this process.

Furthermore, Mahler and Kaplan (1977) posit that in normal early development "self-constancy, that is, individual entity and identity, should be achieved at the end of the rapprochement subphase, in addition to a level of object constancy that facilitates triangular whole-object relations cathected with neutralized libido and aggression" (p.72). Prior to this achievement, defensive splitting is a normal means by which to understand oneself and others.

Like Kernberg (1967), Mahler (1971) believes that splitting is a primitive defense mechanism used to keep the good object from being overwhelmed by the bad object. "By means of this splitting, the good object is defended against the derivatives of the aggressive drive" (Mahler, p. 413). Mahler underscores the pent-up aggression often found in borderline adolescents and sees this as coming from either a lack of frustration tolerance, difficult environmental factors (e.g. poor familial relationships), or both.

Another central figure in the object relations theory of BPD is James F. Masterson (1980). He also focuses on the separation-individuation phase of early childhood in the development of BPD. He emphasizes the etiologic importance that a highly disturbed relationship with the mother can have for the person's sense of safety and relatedness with self and others. During this early

phase, the child achieves object constancy and is able to hold on to a cognitive representation of the caretaker when he or she leaves the room. These early object relations are the internal representations that the person carries of him- or herself, others, and the world, and they affect how the child thinks and behaves. Masterson focuses primarily on the role of splitting and fragmentation of identity as resulting from a poor early mother-child relationship.

Masterson (1978) further states that if developmental arrest occurs in the separation-individuation phase, between the 18th and 36th month, the self and object representations would be split into “all good” and “all bad” representations. This arrest may occur because the mother encourages and rewards attachment, but sabotages autonomy. Beresin (1994) states that the mother, not being able to tolerate separation and abandonment, transmits to the child the message that the child must stay attached to the mother or die. Masterson also postulates other problematic situations, such as a psychotic mother, absent mother, or depressed mother. Beresin concludes that the mother does not need to be borderline, but does need to be intolerant of separation and fearful of abandonment.

Winnicott (1965), like Mahler, also emphasizes the high sensitivity of the individual's personality to borderline psychopathology during the rapprochement subphase. He stresses the child's need to come to terms with his or her aggression. The potential exists for the child to feel that his or her primary object, necessary for survival, could be destroyed by this aggression. This

realization necessitates learning to tolerate and understand feelings of anger, ambivalence, and primitive guilt.

Moreover, Winnicott (1953) believes that transitional objects become important during early separation and individuation because of their ability to soothe the child when the mother is unavailable. Evocative memory--a cognitive development during this period-- allows the child to recall the libidinal feelings that he or she has toward the mother, and to place them on a transitional object so that the child can feel comforted when the mother is not available.

Winnicott also stresses the early need to feel omnipotent, which is encouraged by the parents' admiration and mirroring. Although the parents will ultimately fail the child, resulting in narcissistic injury, this pain can be more easily tolerated through the use of the transitional object. The parents do not have to be perfect, but instead need to focus on providing a “good enough” holding environment with “good enough” mothering to ensure that the child feels safe, develops good self-esteem, and achieves a sense of self that is separate from the parents. Failures are necessary and need to be balanced with enough successes, so that the child feels able to take on the tasks of further development. Striking this balance, between failures and successes, helps a child develop more realistic and integrated object representations of her parents, herself, and others. Without the provision of a good enough environment, however, the child can become vulnerable to character pathology (1975).

Adler and Buie (1979) note the lack of family sensitivity to the child's developmental needs as significant. If the child perceives that the parent cannot survive the child's separation, or if his or her feelings are continuously disavowed, serious pathological consequences can result. Adler and Buie theorize that parental discouragement of early individuation and healthy maturation can cause a deficiency in evocative memory, which can result in an inability to soothe oneself when alone. This can lead to low self-esteem and a lack of empathy. As a result, pathological defenses such as splitting and projective identification may persevere, in order to preserve the integrity of the individual. Failure of a good holding environment in childhood and/or adolescence prevents the development of ego autonomy and interferes with the ability to have concern for others, feel guilt, and mourn, all of which are contingent on the integration of good and bad object relations. In later development, adolescent conflicts over individuation are more problematic because of the poor foundation left by the earlier separation period. Earlier unresolved issues are thus brought to the fore, creating a heightened vulnerability to BPD.

Rinsley (1982) proposes that borderline and narcissistic conditions result primarily from a contemporary laissez-faire system of child-rearing where highly subjective and confusing values, mutual parent-child alienation, and the blurring of roles between parent and child predominate. Rinsley emphasizes the split that occurs due to the conditional availability of the mother. In this conception, the

mother is often thought to be borderline herself and often reacts in an unhealthy manner to her child's efforts to separate from her during the rapprochement subphase of development. When her child behaves autonomously, she pulls away; whereas if her child is clingy and needy, she is reinforcing. This results in the child's feeling that he or she is bad when acting independently and good when acting dependently. This split between good and bad, in Rinsley's theory, produces the borderline pathology, and the accompanying defense mechanism of splitting, which interfere with the child's identity development.

Several theorists suggest that it is perhaps best to see the etiology of BPD as multi-determined (Ludolph et al., 1990; Weston et al., 1991; Beresin 1994; Zannarini 1997). For example, Ludolph et al. (1990) found that nine variables predicted 89% of the BPD diagnoses in their sample. These included neglect, maternal rejection, grossly inappropriate parental behavior, parental loss, number of surrogate mothers and fathers, number of relocations, physical abuse, and sexual abuse. Weston et al. (1991) demonstrated the high incidence of physical and sexual abuse, along with maternal rejection and neglect, in borderline adolescent girls when compared with controls.

Millon (2000) also speaks to a "multifactorial mix of determinants" and places great importance on a "sociocultural" conception of the borderline personality. He also views early development as an important etiological factor, but suggests that equally important are two broad socio-cultural trends that have come to characterize much of Western life over the past 25 years.

> First, the emergence of social customs that exacerbate rather than remediate early, errant parent-child relationships, and second, the diminished power of formerly reparative institutions to compensate for these ancient and ubiquitous relationship problems (p. 123).

Millon suggests that an increase in divisive and diffusing social customs, such as increased mobility, separation, divorce, drug abuse, unreliable and unpredictable television role models; along with a decrease in reparative social customs and extended family associations play an important role in producing BPD.

> Segmented and fragmented, subjected to the flux of their own contradictory attitudes and enigmatic actions, their sense of being remains precarious. Their erratic and conflicting inclinations continue as cause and effect generating new experiences that feed back and reinforce an already diminished sense of wholeness (Millon, p. 125).

Judith Herman (1992) states that "repeated trauma in adult life erodes the structure of the personality already formed, but repeated trauma in childhood forms and deforms the personality" (p. 96). Almost all theories postulate problematic parent-child relationships in the formation of BPD. However, it is also important to ask whether or not chronic abuse or neglect, beginning later than the early stage of separation and individuation, and even as late as early adolescence, could not also result in BPD. This brings into question the idea of whether BPD is actually a trauma spectrum disorder along the lines of post-traumatic stress disorder (PTSD). Some would say that BPD is more accurately portrayed as a chronic form of PTSD, but the difference between the two are age of onset.

John G. Gunderson and Mary M. Zanarini are two highly respected researchers in the area of BPD. Gunderson's focus tends to be on the differential diagnosis of BPD. He contends that BPD can be discriminated by intense unstable relationships, repetitive self-destructive behavior, chronic fear of abandonment, distorted thoughts and perceptions, hypersensitivity, impulsive behaviors, and poor social adaptation. He is also known for his construction of the Diagnostic Interview for Borderlines (DIB).

Zanarini, also well known for her study and research on the differential diagnosis of BPD, has spent the last 20 years systematically studying the etiological factors leading to the development of BPD (Zanarini, 1993/2000). In her tripartite model, she suggests that there are three factors that greatly contribute to the development of BPD: a traumatic home environment, a vulnerable temperament, and a triggering event or series of events.

Zanarini has also outlined the developmental course that research on BPD has taken during the last 30 years. She lays out six main conceptualizations (Zanarini, 1997). The 60s and 70s focused on the propensity of borderline patients to have transient psychotic-like experiences. In this view, BPD was thought of as being a schizophrenia spectrum disorder. Kernberg (1975) used the term borderline to describe most serious forms of pathology, with excessive early aggression and splitting at its root. Gunderson (1984) described a specific form of personality disorder that can be distinguished from a substantial number

of other Axis II disorders. In the 1980s, BPD was thought of as an affective spectrum disorder with chronic dysphoria and affective lability.

The fifth and sixth theories took hold during the 1990s. van der Kolk (1997) suggested that BPD might be better conceptualized as a trauma spectrum disorder, related to PTSD and dissociative disorders. Finally, Zanarini (1993) and her colleagues proposed that BPD is best conceptualized as an impulse spectrum disorder related to substance use disorders, antisocial personality disorder, and perhaps eating disorders. Taken together these theories highlight the multidimensionality of BPD and the close association that it often has with other forms of pathology.

The last theory I will discuss is Marsha Linehan's bio-social theory. Linehan is most well known for the creation of Dialectical Behavior Therapy (DBT) for the treatment of BPD. DBT is a form of cognitive-behavior therapy developed specifically as a comprehensive treatment for chronically suicidal individuals who meet the criteria for BPD. The "dialectical" aspect stems from Hegelian philosophical ideas and Zen Buddhism. For Linehan, the core psycho-social dysfunction and or psychological trauma to the central nervous system lead to three general consequences for persons with BPD: extreme emotional lability, extreme sensitivity and reactivity, and slow return to baseline, once arousal has occurred.

Her program of treatment for BPD has been widely successful in treating BPD in different populations, including adolescents (Katz et. al., 2002; Woodbury

et.al., 2002) and has been well validated empirically (Linehan et. al., 1991; Linehan et. al., 1993; Linehan et. al., 1994). The success of her treatment makes an analysis of her theory worthwhile to this study.

Linehan's bio-social theory of BPD hypothesizes that the disorder is a consequence of an emotionally vulnerable individual growing up within a particular set of environmental circumstances which she refers to as an "invalidating environment":

> In an invalidating environment, expression of a person's private experiences, especially those having to do with emotions, are consistently negotiated or ignored; difficulties meeting environmental demands are trivialized; the ease of problem solving is oversimplified; and there is an unrealistic emphasis on positive thinking. Invalidating environments fail to teach the individual how to label and regulate emotional arousal, how to tolerate distress, and when to trust their responses as valid reactions to life events." (Linehan, 1993b, p. 3).

Linehan emphasizes that this theory has not yet been supported by empirical evidence but that the values of the technique do not depend on the theory being correct since the effectiveness of DBT has received such strong empirical support (Linehan, 1993a). The research done on Linehan's work has focused on validating DBT rather than proving her theory. In relation to the other theories discussed in this dissertation, her theory is comparable if one considers the "invalidating environment" as a more specific description of the early traumatic experiences hypothesized to be predictors for BPD by the object relations theorists.

From the research discussed in this section, it is apparent that there is no absolutely proven etiology for BPD. The classical object relations based theories seem the most useful in describing the intrapsychic dimensions of splitting, separation and individuation, object relations and reality testing. These theories reveal the internal psychic consequences of the environmental factors described both by the classical theorists and expanded upon by later theorists. All of these theories support the most current concept that the etiology of BPD is multi-determined and multifaceted.

Borderline Personality Disorder and Other Disorders

The heterogeneity of BPD is seen in its extensive comorbidity. It is extremely unusual to see a single diagnosis of BPD as the pure form of the disorder is rare (Blais et al, 1999). Axis I components such as depression, anxiety, substance abuse, adjustment and post-traumatic stress are commonly found in borderline and other personality disorders. It is therefore more common than not to see at least a dual diagnosis on Axis I and Axis II, and sometimes co-occurring Axis II disorders, when looking at BPD (Zimmerman et. al., 1999).

Axis I Comorbidity Personality disorders are persistent, pervasive, enduring, and stable in contrast to Axis I mental disorders, which are more discrete and episodic (McDavid, J. D., 1996; Perry, J. C., 1993; Grilo). In a study of 504 inpatients with personality disorders, Zanarini et. al. (1998) found that anxiety disorders were almost as common in borderline patients (N = 379) as mood disorders, and were far more discriminating than in Axis II comparison

subjects (N = 125). Post-traumatic stress disorder (PTSD) was found to be a common but not a universal comorbid disorder among borderline patients. This view is consistent with the finding that borderline personality disorder is potentially a form of chronic PTSD. Male and female borderline patients were found to differ in type of impulse disorder e.g., substance use disorders were significantly more common among male borderline patients, while eating disorders were significantly more common among female borderline patients. A lifetime pattern of complex comorbidity was found to have high predictive power for the borderline diagnosis as well as a high degree of sensitivity and specificity. These results suggest that a lifetime pattern of Axis I comorbidity is characteristic for borderline patients and helps distinguish them from patients with other disorders.

Differentiating BPD from other Axis I disorders (e.g., Bipolar Disorders, Posttraumatic Stress Disorder [PTSD], and Dissociative Identity Disorder [DID]) and Axis II personality disorders can likewise be difficult because these disorders also often involve a lack of integration in personality structure. Some theorists argue, for example, that DID may be a special case of BPD because up to 70% of patients with DID also meet the criteria for BPD (Shearer, 1994). This recategorization, however, is complicated by the fact that individuals with DID almost always have a history of severe abuse, especially sexual abuse, while approximately one-third of patients with BPD report no indication of trauma history of posttraumatic symptoms (Shearer, 1994).

Self-destructive behavior, comorbidity with eating disorders (especially bulimia) (Herman, 1992), and persistent acting out are characteristics that also help distinguish BPD. The stability of these manifestations and the identity disturbance help to classify BPD as a personality disorder distinct from Axis I and other personality disorders.

The comorbidity of bipolar disorder and borderline personality disorder has received a great deal of attention in recent years. The question has been posed by several researchers if borderline personality disorder is actually a bipolar spectrum disorder (Deltito, 2001; Magill, C. 2004). As stated earlier, persons with BPD usually have multiple diagnoses, especially including affect disorders. Magill (2004) did a literature review of the research that has been done over the past 20 years regarding the comorbidity of BPD, bipolar disorder, affective disorders, and personality disorders. The studies reviewed demonstrated a greater co-occurrence between BPD and bipolar disorder than between BPD and any other Axis I or II disorders. She concluded that in order avoid misdiagnosing patients presenting with both affective instability and impulsivity, a detailed longitudinal history is essential (p. 551). Thus, if BPD and bipolar disorders are to be differentiated, the patient's history is what should be the discriminating factor.

Deltito et. al., (2001) examined clinical indicators for bipolarity in a cohort of patients suffering from BPD. These indicators were history of spontaneous mania and hypomania, bipolar temperaments, pharmacologic response typical of

bipolar disorder, and a positive bipolar history. They found that 13 to 81 percent showed signs of bipolarity. "Based on the fact that the emerging literature supports as a rigorously defined bipolar spectrum (bipolar I and II), we submit that at least 44 percent of BPD individuals belong to this spectrum; adding hypomanic switches during antidepressant pharmacotherapy, the rate of bipolarity in BPD reaches 69 percent" (p. 221). The limitations of this study are in part the small sample size. The study nonetheless provides important evidence suggesting the frequency with which persons manifest both disorders.

The DSM-IV (1994) allows for the dual diagnosis of all Axis I disorders with BPD. There is in fact a high incidence of co-occurrence between BPD and these disorders as BPD is almost never diagnosed as a separate entity. More often than not, individuals who have a diagnosis of BPD are also diagnosed with mood disorders, depression, anxiety disorders, and impulse control disorders such as eating disorders. This comorbidity highlights and intensifies the complexity of the disorder itself.

Axis II Comorbidity The notion of personality disorders has increased in acceptability in the past 20 years, largely due to systematic and comprehensive research, improved methods of assessment, and increased use of psychotherapy and health services by this population. BPD has received more attention than the others partly because of its wide range of presentations and partly because of the fact that it has been empirically demonstated to be

responsive to both pharmacological and psychotherapeutic treatment (Zanarini et. al., 2001).

BPD is the most prevalent of the personality disorders and it accounts for up to 60% of personality disorders among clinical populations (APA, 1994). The features of other personality disorders are often considered more intrinsic, and individuals manifesting other Axis II disorders often don't seek treatment. Persons with BPD, however, dominate psychiatric referrals to emergency centers and psychiatric hospitals, receive years of therapy with multiple therapists in different treatment modalities, and receive pharmacotherapy that includes antidepressants, anti-anxiety medication, mood stabilizers, anti-psychotics, and sleep agents (Zanarini, et. al., 2001).

The primary reason that BPD differs significantly in its presentation from other personality disorders lies in its precursors. History often includes abuse (sexual, physical, and emotional), neglect, and multiple, inconsistent caretakers. Zanarini (1997) reveals a complex, multidimensional etiology. One study (Bezerganian et al, 1993) examined 776 adolescents and found that maternal inconsistency in child upbringing predicted an emergence of BPD, but was not related to any other personality disorder.

In another study, Zanarini et al. (1998) found a high degree of comorbidity between BPD and "anxious cluster" personality disorders (DSM-III-R, 1987). Odd (schizotypal, schizoid, paranoid) and anxious cluster (dependent, avoidant, self-defeating, passive-aggressive, and obsessive compulsive) disorders were

found to be significantly more common among borderline patients than Axis II controls. Both odd and dramatic cluster (antisocial, narcissistic, histrionic, and sadistic) disorders were found more often among male than female borderline patients (p. 301).

In another study, Zanarini, et al. (1990) found seven features to be mostly specific to BPD: quasi-psychotic thought; self-mutilation; manipulative suicide efforts; abandonment/engulfment/annihilation concerns; demandingness and/or entitlement; treatment regressions; and countertransference difficulties. Although the pattern of clinical features exhibited by borderline patients is probably more discriminating than any one feature taken alone, these seven features were both highly discriminating and relatively specific for BPD (p. 166).

The degree of identity integration can serve to differentiate BPD from other personality disorders, Axis I disorders, and normal functioning. The DSM-IV (1994) rightly notes this in its definition: "a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts" (p. 654).

As with Axis I, BPD also occurs with Axis II disorders, while it almost never exists as a single diagnosis. This comorbidity again reflects the complex presentation and etiology of BPD.

Differentiating the Borderline Adolescent from Other Adolescents

Adolescence is often a challenging time because of the maturational changes and societal responsibilities that are imposed on the individual as he or

she transitions into adulthood. The symptoms of the troubled adolescent are sometimes similar to the more extreme manifestations of problems that occur in the borderline adolescent. It is therefore important to understand what precisely distinguishes normal and other-disordered adolescents from adolescents with borderline personality characteristics. Both struggle with the developmental demands of maturation and the societal demands of emerging adulthood. One must know where to look if an answer is to be found. The literature supports the idea that adolescents with BPD can be distinguished by their separation and individuation difficulties (Blos, 1967; Schaefer, 1972; Block, K., et al., 1991), the degree of defensive splitting (Kernberg, 1978; Masterson, 1975; Ludolph et al., 1990), and the poor quality of their object relations and reality testing (Kernberg, 1978; Westen, 1989).

Adolescents can be characterized to some degree by incomplete ego development, fluidity and ease of regression in functioning, incompletely consolidated defense functioning, mood lability, and a high reactivity to interpersonal or social changes (Kutcher & Korenblum, 1992). Westen et al. (1990) have shown, however, that borderline adolescents can be reliably discriminated from normal adolescents and non-borderline psychiatric inpatients based on: 1) their more malevolent object representations, 2) a lowered capacity for emotional investment in relationships and moral values, 3) less accurate, complex, and logical attributes of causality and understanding of interpersonal relations, and 4) poorly differentiated representations of others.

Moreover, Ludolph et al. (1990) found that hospitalized borderline adolescents can be distinguished from non-borderline and normal adolescents on the basis of a number of developmental history variables, including disrupted attachment histories, pre-oedipal risk factors (such as abuse, neglect, and losses in the first four years), and the number of mother and father surrogates. Similarly, Westen et al. (1990) found a systematic relationship between borderline symptoms and a history of sexual and/or physical abuse. In one study these authors found that half of their subjects with BPD had experienced sexual abuse, most of which had occurred during latency. They concluded that abuse during latency is likely to have a permanent negative influence on personality structure, especially in the areas of identity, self-esteem, capacity to regulate affects, reality testing, expectations in relationships, and in terms of the ability to develop strategies for achieving personal goals. Problems in these areas are frequently associated with BPD and can severely impair a person's ability to function more autonomously. The findings of Westen and his colleagues thus corroborate psychoanalytic hypotheses implicating interference in attachment relationships in the etiology of BPD.

Thus BPD in adolescents is distinguished by multiple factors, as it is in adults. A history of early trauma, including abuse and neglect, leads to problems in intrapsychic phenomena such as splitting, separation and individuation, and object relations and reality testing. Genetic predisposition cannot be discounted.

All of these factors make the individual particularly vulnerable to developing BPD in adolescence.

Adolescent Development

Reaching adulthood with a relatively intact, adaptive identity requires the adolescent to gain some autonomy from his or her caretakers and create a life of his or her own design. Of paramount importance are decisions about career, peer group affiliations, and the establishment of a set of personal values. These decisions eventually enable the person to live a relatively stable, well-integrated life. The actual degree of optimal individuation from caretakers varies from person to person and from culture to culture, but societal pressures in every culture require that the adolescent take on more individual and societal responsibilities as he or she matures. The ease of the transition from adolescence to adulthood depends, to a great extent, upon how well the transitions between earlier developmental stages have gone. Both environmental factors and genetic predispositons play a role.

Blos (1967) looks at adolescent development from a psychoanalytic perspective and proposes that there are four interconnected tasks and challenges of adolescence, which, when satisfactorily resolved, indicate that adulthood is at hand. These are:

(1) the negotiation of the "second individuation process", where the primary task is to separate from the internalized objects of childhood;

(2) the development of ego continuity, which implies the ability to develop a sense of the past, present, and future with adequate reality testing;

(3) relative mastery of the accumulative traumas of infancy, childhood, and adolescence;

(4) the establishment of a sexual identity (Blos, 1967, p. 1).

Although these tasks directly relate to what needs to be accomplished intrapsychically, changes also manifest themselves behaviorally.

Meissner (1984) suggests that a successful transition from adolescence to adulthood yields an integrated self-concept, a sexual identity, loosened parental ties with increased autonomy, more adult social roles and relationships, and a mature, adaptive, flexible super-ego. Developmental tasks such as choosing a career, finding a mate, moving away form home, and becoming less dependent on one's parents are much more difficult to accomplish without first dealing adequately with these intrapsychic challenges. The more vulnerable person will experience great stress during this transition, and is less likely to have a good outcome in terms of his or her personality organization.

Adolescence is also a time when one is confronted with the problem of self-definition. It cannot be understood without knowing what came before and what follows. The developmental orientation attempts to detail how that which existed at earlier life stages becomes transformed into something related to, but also different than, what existed earlier. “Whether this task is created by social circumstance, internal developmental phenomena, or a combination of both

forces have been issues debated in the recent and growing volume of literature on adolescent development" (Kroger, 1989, p.1).

In adolescents with BPD, identity is kept relatively fragmented by the defense mechanism of splitting (Kernberg, 1986). Splitting seems to be responsible for mood instability, which is reflected in the tendency to shift back and forth between seeing the world as either all good or all bad. This defense mechanism is used as well by normal adolescents as they attempt to progress towards higher degrees of individuation (Block, Weston, Ludolph, Wixom, & Jackson, 1991). An interesting finding by Westen et al. (1990) discovered that many borderline adolescents exhibit high complexity of thought. This complexity occurs at different levels of severity, as does splitting. This suggests that persons with BPD can exhibit high degrees of self-complexity and yet be severely dysfunctional.

The average adolescent goes through periods of dysfunctionality and maladaptive thought and behavior while transitioning from adolescence to adulthood. This transitional period actually defines adolescence. Borderline adolescents can exhibit a similar complexity and dysfunctionality. The difference is to some degree a question of intensity and duration of the transitional period or the persistence of maladaptive thought and behavior. It is therefore important to emphasize the difference of degree when differentiating borderline adolescents from normal and other disordered adolescents.

Adolescence as a Second Individuation Process The "second individuation process of adolescence" is a term used by Peter Blos (1968) to identify the ways in which the developmental period of adolescence can be likened to what Mahler called the separation/individuation stage of early childhood. In adolescence, the process is considered to be a regression to this earlier stage. Blos theorizes that any unresolved problems of early childhood separation-individuation will reappear and press for resolution in the later stage.

The first and second periods can be compared to each other in several respects. Both stages involve a progression where the individual gains more of a sense of self as separate from others in both the object relations and intrapsychic world and in the social realm.

> "What is in infancy a hatching from the symbiotic membrane to become an individuated toddler becomes in adolescence the shedding of family dependencies, the loosening of infantile object ties in order to become a member of society at large or, simply, of the adult world" (Blos, 1967, p.32).

This experience of separateness involves varying levels of anxiety and fear, which are provoked by maturational or psychosocial processes. These processes necessitate the shattering of the illusion that the parents or primary objects will always be there for security and protection. Maturational changes create a heightened vulnerability and urgency for modifications in personality organization. And that, in turn, poses an increased risk for the development of psychopathology.

Blos (1967) argues individuation process involves freeing oneself from the archaic or omnipotent image of the internalized infantile mother. This severing means returning to the stormy, often tantrum-ridden, ambivalent love-hate relationship the toddler has to negotiate in the early separation/individuation and rapprochement process.

In Blos' seminal article on the concept of separation and individuation, he observes that there are several changes in the adolescent's object relations that occur during the second individuation process. As the individual moves toward adulthood, self and object representations are not as vulnerable to cathectic shifts; these representations gradually acquire greater stability and firmer boundaries and reality testing becomes more acute. The ego ideal becomes much more important, while the oedipal superego (the idealized parent of childhood) loses some of its rigidity and power. This shift also allows the adolescent to become more independent of external sources or, at least, it allows the adolescent to shift dependence to external sources of his or her own choosing.

Blos further suggests that the disengagement from internalized infantile objects involves a strengthening of the narcissistic ego ideal, and it allows for the possibility of new, extrafamilial, love objects to come into the adolescent's world. This shift in love objects allows for a decathecting and recathecting of the individual's libidinal drives. The drives increase greatly during this period, which work to weaken the ego. The ego is further weakened because the process of

disengaging involves letting go of the parental ego that has been selectively available until this time.

Ideally, according to Blos, the interaction between drive (id) and ego during this period will result in a more stable intrapsychic structure, enabling the person to develop more mature relationships and to take on the other tasks of adulthood. The final results of these structural changes will be the enduring personality attributes that characterize the adult individual, for good or bad:

> “The degree of maturity, ultimately attained, depends on how far the individuation process advanced or where it came to an impasse and was left incomplete. The second individuation, therefore, connotes those ego changes that are the accompaniment and the consequence of the adolescent disengagement from infantile objects" (Blos, 1967, p.148).

Disengaging from infantile objects involves a psychic regression and a working through of any past issues that need to be resolved (i.e., infantile trauma, conflict, or fixation). Blos feels that adolescence is the only period of normal development where regression actually plays an essential and positive role. Furthermore, he emphasizes that "the task of psychic restructuring by regression represents the most formidable psychic work of adolescence” and that this ego regression contributes decisively to the uniqueness of a given personality (Blos, 1967, p. 102). This regressive pull is more easily regulated by a healthy adolescent ego, because of its ability to remain intact, and is due to its more mature, reality-bound, and self-observing nature.

Blos believes that the second individuation process must draw its strength from the early ego states. The more intact the adolescent's ego, the more limited the ego regression. According to Blos,

> "the adolescent has to come into emotional contact with the passions of his infancy and early childhood, in order for them to surrender their original cathexes; only then can the past fade into conscious and unconscious memories, and only then will the forward movement of the libido give youth that unique emotional intensity and power of purpose" (Blos, 1967, p. 161).

If the adolescent has a defective ego structure, then regression can turn into a developmental impasse, which can result in different manifestations of psychopathology, even psychosis. The adolescent's inability to disengage from early object ties signifies just how much the person has lived on borrowed ego strength throughout his or her earlier years.

The adolescent must prove capable of handling situations that made him or her feel inadequate in the past in order to realize that it is possible to survive without the security of the infantile objects of childhood. Acting out behavior is therefore characteristic of the adolescent period. Early traumas need to be worked through, conflicts need to be resolved, and fixations need to be understood and dealt with in order for more autonomous adult functioning to be possible. Reality testing becomes more critical, and through trial and error, the adolescent begins to establish a more realistic view of the world and his or her possible roles in it. The individual tries on different roles and behaviors with different groups of peers in order to find those which are suitable.

Offer et al., (1991) agree that adolescent development involves the development of many roles or even selves: the psychological self, the social self, the sexual self, the familial self, and the coping self. Without individuation, there is no sense of real or false self, and the adolescent will continue to use the splitting defense, seeing others as all good or all bad, due to the lack of object constancy.

Shafer (1972) suggests that "psychologically, only an already highly individuated person is capable of giving up his infantile relations to others" (p. 43). Adolescents make use of defensive regression (including splitting) have wishful fantasies of remaining close to parents, and have a tendency to idealize parents. What needs to most urgently transform is the inner world, particularly the archaic infantile world. "Genuine emancipation seems to be built on revision, modulation, and selective acceptance as well as rejection, flexible mastery, and complex substitutions and other changes of aims, representations, and patterns of behavior. These changes are necessarily slow, subtle, ambivalent, limited, and fluctuating." (p.45)

If the process of individuation is successful, parents come to be experienced more as real people with real flaws rather than as the idealized parents of the past. A transformation of object relationships occurs such that the parental objects become more human. As adolescents gain the ability to see their parents in a more realistic fashion, they also gain the ability to choose those characteristics (e.g. values) they want to emulate. The emerging differentiation

within the ego between self and other results from this process: this is what Blos conceptualizes as the second individuation.

Not only does the young adult come to recognize the parents as more real, but he or she also moves into the process of establishing a relationship of greater equality with the parents. In this second "rapprochement" phase, “the process of assuming the role, responsibilities, cares, and interests of nurturing another generation" has the effect of "integrating part self-images with internalized parental images, both conflictual and conflict free" (Staples and Smarr, 1991, p.422). Thereafter, the task involves a continuous resolution of whatever conflicts remain, a process that will hopefully result in the successful attainment of a healthy adult identity.

As normal development proceeds, Shafer (1972) contends, self-representations are differentiated more often, more sharply, and in a more stable fashion (p. 53). Shafer says that the idea of detachment in the individuation process is itself concretistic.

> In his struggle to detach himself, the adolescent will be unconsciously working over these concretized feelings and influences. Sometimes he will hide, conserve, perhaps protect what he values by keeping it inside. Often he will unconsciously imagine that he is expelling threatening feelings and influences into his parents’ minds and bodies; in his fight or flight, his blocked reincorporations, and his hypervigilance, he will think of himself as guarding against the poisons, prisons and other perilous spaces places, and substances in the outer world (p. 47).

During this process the adolescent will feel both a sense of loss of identity and a sense of disconnectedness as a new sense of self emerges (p. 47).

The disengagement from the infantile object relations of the past and the establishment of intimate adult relationships often requires the adolescent to go through a period of narcissism, where object libido is converted into narcissistic libido. This is evidenced by the self-centeredness and self-absorption that some adolescents display. They often go to great lengths to distance themselves as much as possible from their parents in order to begin to establish some autonomy from them. Although this can affect their reality testing adversely, it is often a necessary defense to compensate for the mourning and insecurity that accompanies the loss of early object ties. An object hunger can also be observed which is evidenced by a desperate clinging to peer groups in order to maintain some sense of temporary connection. According to Blos (1967), "A healthy ego cannot tolerate well, and for long, being cut off from healthy object relations" (p. 177). The adolescent goes through necessary periods of regression and reality testing in order to form closer relationships and attain a more personal and autonomous lifestyle.

Blos' second individuation stage of adolescence and Mahler's concept of separation-individuation in early childhood are commonly critiqued on the basis that they are too individualistic in focus and do not place enough emphasis on the need to remain connected.

Anna Freud's ideas that "adaptation depends on breaking ties" and on "renouncing one's childhood relationships," were adapted by Blos in his classic paper positing the adolescent shedding of familial attachments as requisite for

adult involvement in society (Blos, 1971). Closer examination reveals that Blos does indeed recognize the importance of maintaining connections. Although Blos does not discuss at length the role of the social context in adolescent development, he recognizes the importance contribution that parents, teachers, and others play in facilitating the second individuation process.

> "No adolescent, at any station of his journey, can develop optimally without societal structures standing ready to receive him, offering him that authentic credibility with which he can identify or polarize … the psychic structure of the individual is critically affected for better or worse, by the structure of society … what I try to emphasize here is the fact that the successful course of adolescence depends intrinsically on the degree of intactness and cohesion which societal institutions obtain." (Blos, 1971, p. 97)

The phrase "the second individuation" and the language of object relations have helped to obscure what Blos meant by his theory. Other theorists (Kroger, 1989) have failed to recognize that he was referring to individuating from the early, infantile object ties of childhood, not the current relationship. This does not imply relinquishing the strong connection in these relationships, in fact, quite the opposite. Blos explains that these early object ties need to be transformed, not discarded, and that maintaining a connection plays a critical role in becoming individuated. (Blos, 1971).

Authors like Josselyn (1980) and Quintana and Kerr (1993) have clarified and extended Blos' ideas by purporting that the second individuation process of adolescence is a time when the experience of both separateness and connectedness are essential for the healthy development of the individual.

Quintana and Kerr strongly suggest that Blos' critics claim that Blos' descriptions of adolescent separation and individuation are most often used to "justify the assumption that adolescent development progresses from dependence to independence in relationships, especially in parent-adolescent relationships" (p.349). Quintana and Kerr (1993) demonstrate that participation in relationships that support separateness, mirroring, and nurturance needs is associated with freedom from depressive complaints. It is essential that these needs be met for identity development to proceed in a normal fashion during both early and late individuation. Nurturance and mirroring help us feel safe and accepted.

Others have understood, correctly, that Blos regards the second individuation of adolescence as involving the establishment of a sense of self that remains connected to the family. For example, Daniels (1990) states that "Normal adolescent development ... cannot be accomplished if adolescents continue childhood-like attachments to their parents; nor can they be achieved by becoming totally disconnected from the family" (p. 106).

Blos (1979) writes about the Piagetian stage of formal operations and how progression into this stage provides the cognitive capacity to develop into the adult self. Harter (1990) elaborates on this idea by giving a more complex description of the cognitive development that occurs during adolescence. She states that the period of late adolescence involves the "emergence of newfound cognitive capacities as well as changing societal expectations that, in concert,

profoundly shape and potentially alter the very nature of the self-concept" (p. 205).

Moreover, Harter observes, the late adolescent functions at a more sophisticated level of formal operational thinking, one distinguished by the ability to integrate numerous abstract self-descriptions into a coherent self-theory. She considers the formulation of an integrated theory of self to be the primary developmental task of adolescence. Early and middle adolescent struggles involve having to live with these less integrated self-abstractions until a sufficient number of different roles and behaviors have been tried, thus enabling the adolescent to decide which ones to include in shaping his own character. Harter's description of the processes that underlie adolescent self-concept formation complement Blos's descriptions of the intrapsychic and psychosocial development that occurs.

In summary, the second individuation process described by Blos is an account of adolescent development that richly describes the intrapsychic changes and their social counterparts that occur as the adolescent transitions into adulthood. He picks up on Mahler and Kernberg, and incorporates their ideas of separation and individuation, object relations, reality testing, and splitting. These concepts are definitely interrelated, and at times difficult to tease apart, but a more detailed examination of them allows for a greater understanding of how these concepts can be used to help understand and differentiate BPD in adolescence.

Adolescent Object Relations and Reality Testing

Tyson and Tyson (1990) define object relations as:

> Unconscious mental representations of objects and the sense of self interaction with them that are built up as development progresses from interpersonal interactions. Representations of the important relationships and experiences of childhood can be found in them, and they profoundly affect the person's interpersonal interactions and object choices (p. 333).

The character of normal adolescent object relations in the object relations perspective is closely tied to the separation and individuation process. As the adolescent proceeds through this developmental stage, the primary objects of early childhood go through an intrapsychic transformation from idealized all-loving, all fulfilling ideal infantile object representations to a less idealized parents who did a "good enough" job (or, at the very least, did the best they could given their shortcomings.) This process of individuating or disengaging from infantile objects may well last into late adolescence and early adulthood. "If it is successful, this internal process gradually lessens the painful ambivalence of the preoedipal and oedipal object ties, and a progressively more mature, mutually satisfying relationship with the parents eventually emerges" (Tyson & Tyson, (1990, p.116).

The developmental course to this healthier object world involves a gradual shift, where self and others become increasingly more complex and where the "grey" beteen the black and white notions of good and bad are gradually filled as the adolescent develops a more realistic view of people. In contrast, the

malevolent object world of the borderline is one where good and bad object representations persist, and their integrity is maintained, by the primitive and unconscious splitting defense. This results in a lower level capacity for emotional investment in people, relationships, and moral values; and less accurate, complex, and logical attributions of causality in understanding human interaction (Westen et al., 1990, p. 345).

As revealed in the previous section, the normal adolescent developmental course involves an individuation from the caretakers and an investment in new relationships, both friendships and intimate relationships. The healthier the individuation process, the healthier the intrapsychic dimension and the new object ties will be. This has been demonstrated in some of the more current research on adolescent object relationships. For example, Westen et al. (1990), revealed that borderline adolescents can be reliably discriminated from normal and other disordered adolescents based on the pathological quality of their object relations (p. 338).

Reality Testing in Adolescence

Kernberg (1978) defines reality testing as "the capacity to differentiate self from nonself, intrapsychic from external origin of stimuli, and to the presence of empathy with ordinary social criteria of reality in interpersonal situations." He states that reality testing can be evaluated by the clinician in three successive steps: first, by evaluating if a patient presents true hallucinations and/or delusions (which would indicate the loss of reality testing); second, by evaluating the

patient's capacity to empathize with the therapists observations regarding strange or bizarre aspects of the patient's behavior, affect, or thought content in the present; and third, by evaluating the consequences of interpretation of primitive defensive operations in the patient-therapist relationship. "Transitory integration following such interventions indicates good reality testing (in contrast to further disintegration when primitive defensive operations are interpreted, as is typical for the psychoses (p. 299)."

One can deduct from Kernberg's descriptions above, that the normal adolescent would be toward one end of the reality testing spectrum and the borderline adolescent toward the other, with psychotics at the extreme of the latter. The indentity diffusion and quality of object relations that dominate the individuation period of adolescence impact the reality testing of the individual.

The findings in Gunderson et al. (1975) that brief, transient, and reversible psychotic ("quasi-psychotic") experiences sometimes characterize the lives of many borderline patients led to the inclusion of transient paranoid ideation and severe dissociative symptoms in the DSM-IV criteria for the disorder.

Defense Mechanisms

Defense mechanisms are highly important to personality functioning, and their effectiveness are to a large extent dependent upon, and synonymous with, the level of maturity an individual has reached. Both learned and innate, these "tools" develop as the personality develops. The intertwined and mostly inseparable roles that biology and environment play in personality development

make it difficult to sort out the extent to which each affects the developmental process at different stages. Normal and healthy psychological functioning are dependent upon the quantity and quality of defenses that a person has at his or her disposal to cope with situations that occur in the process of everyday life.

In Psychoanalytic Theories of Development, Tyson and Tyson (1990) define defense mechanisms as:

> …various attempts on the part of the ego to protect itself against danger. The danger usually refers to an intrapsychic conflict and arises because a repressed wish threatens to erupt into consciousness, and gratification of this wish has become associated with a real or imagined punishment. The threat of the wish erupting is signaled by painful feelings of anxiety or guilt, and these feelings motivate the ego to ward off the wish or drive. Defenses operate unconsciously, so that the person is unaware of their employment. They are a normal part of development and psychic functioning (p. 326).

Understanding the unconscious nature of defenses is important to understanding how they work to help shape the personality. Since defense mechanisms are believed to develop along with the personality, they can also be immature if personality development has been problematic (Levit, 1993). An over-reliance on immature defense mechanisms often signifies a personality disorder, as, for example, with splitting and borderline personality disorder or projection and paranoid personality disorder. On the other hand, it can be said that there is an inadequate or inefficient use or development of defense mechanisms in anxiety disorders such as social phobia or panic disorder.

Sigmund Freud (1894) first used the term "defense" to describe the ego's struggle against painful or unendurable ideas or affects. Later (1923) Freud used the concept primarily in relation to the drives. Freud's focus at this time was on inner psychic reality and especially the unconscious drives. The function of defense was to modulate or ward off the drives push for discharge, which at the time was referred to as a form of anticathexis.

Anna Freud (1966) later suggested that large portions of the ego are themselves unconscious and often require the help of analysis in order to become conscious.

> "Only the analysis of the ego's unconscious defensive operations can enable us to reconstruct the transformations which the instincts have undergone. Without a knowledge of these ... we shall learn little or nothing about the vicissitudes through which they have passed and the various ways in which they enter into the structure of the personality" (A. Freud, 1966, p. 26).

Here she is essentially saying that in order to achieve a greater level of defensive maturity, we must analyze our past in order to understand how we have become who we are.

Hentschel, Smith, Ehlers, and Draguns (1993) also characterize defense mechanisms as unconscious and add that they can be thought of as successful or unsuccessful (or mature versus primitive). They are "embedded in the social representation of various actions and conceptions, and they are crucial in coping with reality" (p. xxii). In other words, defense mechanisms are indispensable ways of perceiving and responding to the environment.

Adolescence in particular is a time when defense mechanisms play a critical role in the development and shaping of the personality. In her early writings, Anna Freud spoke of adolescence as a time when "The ego of the adolescent represses, displaces, denies, and reverses the instincts and turns them against the self; it produces phobias and hysterical symptoms and binds anxiety by means of obsessional thinking and behavior" (A. Freud, 1966, p. XXX) Later writings by A. Freud (1966) and other psychoanalytic theorists (Blos, 1967; Erikson, 1968 & 1956/1980) describe an upsurge in the strength of the "drives," resulting in a chaotic increase in many of the defenses with the onset of puberty. As this occurs, certain defense mechanisms predominate as social and maturational influences take their course.

In his description of the second individuation process of adolescence, Blos (1968) observed that there occurs a progression toward a greater sense of autonomy. As the adolescent experiences this sense of separateness, varying levels of anxiety and fear are provoked by maturational and psychosocial processes. These processes necessitate the shattering of the illusion that the parents, or primary objects, will always be there for protection.

Moreover, Blos (1967) describes a normative regression to more primitive defenses. If this period is navigated successfully, the individual gradually forms a more integrated sense of self based on "constitutional givens, idiosyncratic libidinal needs, favored capacities, significant identifications, effective defenses,

successful sublimation, and consistent roles" (Erikson, 1956/1980). Blos (1979) refers to this process as the consolidation of character.

Thus, in relatively healthy adolescent development, defenses evolve from the normative chaos and relative primitiveness of early adolescence into more orderly patterns in later adolescence. This development is believed to entail the increased use of more "mature" defenses, which includes ascetism, intellectualization, and identification (Blos, 1962; Cramer, 1988; & A. Freud, 1937).

Cramer (1991) found that the predominant defenses of late adolescence are projection and identification. After arousing anger in a sample of late adolescent college students by criticizing them, their TAT responses showed an increased use of these defenses. These results support the theories of adolescent personality and defense development advanced by A. Freud, Blos, and Erikson.

Vaillant (1977) states that in ascetism, "pleasurable effects of experience are eliminated. There is a moral element in assigning values to specific pleasures. Gratification is derived from renunciation and ascetism is directed against all base pleasure perceived consciously" (p. 376). If applied to a reasonable degree, adolescents use this defense to manage their impulses toward gratification. For example, the college student might put off spending time with a friend until a paper is written.

Intellectualization is considered to be "the excessive use of intellectual processes to avoid affective expression or experience. Undue emphasis is focused on the inanimate in order to avoid intimacy with people, attention is paid to external reality to avoid expression of inner feelings, and stress is excessively placed on irrelevant details to avoid perceiving the whole" (Vaillant, 1977, p. 376). When used to a moderate degree, this defense mechanism is essential in allowing the adolescent to learn appropriate emotional boundaries with others. Also, with the growing demands that adulthood places on an individual, this defense becomes necessary as, for example, when someone needs to prioritize work over personal concerns.

Another defense mechanism used with more frequency in adolescence is identification. Tyson and Tyson (1993) define identification as "changing the shape of one's self-representation to become more like the perception of an admired person or of some aspect of an admired person" (p. 329). During the process of identity formation, adolescents often idolize and emulate people they have a high regard for in order to determine who they want to become. They also imagine and assume different roles to discover what fits with their emerging personality. Identification is normal part of adolescent personality development. Only when it is used excessively does it become problematic to identity and indicate possible characterological issues.

Levit demonstrated that the increasing cognitive articulation and differentiation that accompany advancing personality development in

adolescence facilitates the increased use of intellectualization. Cramer further suggests that the defense mechanism of intellectualization increases in use during adolescence. Jacobson, Beardslee, Hauser, Noam & Powers (1986) found that the use of ascetism and intellectualization was related to high levels of ego development in a group of late adolescents. Haan (1974) also found intellectualization to be related to high levels of ego development.

Splitting Several empirical studies have shown that splitting, usually considered to be a more primitive defense mechanism, is commonly used as a defense mechanism in late adolescence (Gould, 1993). In Gould's validation of the Splitting Index (SI), he found that college students tend to use this defense frequently, although to lesser degrees than persons with borderline and narcissistic personality disorders who have more elevated scores on this measure (i.e., who split more severely).

Gould also found that the SI correlated significantly with measures of dogmatism and social desirability. One can speculate that some degree of dogmatism is inherent as adolescents are forced to assert their identity and loosen the ties to their parents. Late adolescence is a time that demands the prioritization and, to some extent, determination of the future course and role one will take in society. As these issues gain importance, so does social desirability, as the adolescent struggles to declare who he is and find a sense of belonging.

The need to use splitting can be further understood if seen in the context of Blos' theory of the second individuation phase of late adolescence. If

adolescence is seen as a stage that involves increased levels of anxiety due to a series of developmental tasks that must be navigated and to some extent mastered, then a normative regression to the early separation-individuation phase seems plausible.

Grotstein (1985) claims that “Splitting is a basic mental mechanism which includes perceptual, cognitive, and defensive operations. It is a universal experience of man and originates from the experience of existing in separate subselves or separate personalities which have never been totally unified into a single oneness.” He goes on to say that, “Normal personalities are split, but their experience is mitigated by repression” (p. 18).

“Thus in infancy and childhood, when there is a difficulty in establishing a clear-cut, discrete internal world, the unconscious experience of being split predicates a high degree of identification with objects into which the splits are projected. The infant’s sense of oneness may be spread across many objects (Grotstein, p.11).

“Splitting may also be evident by selective lack of impulse control, addictions, and abrupt shifts of identifications between all good and all bad objects” (Grotstein, p. 58).

Splitting was first used in some of the early writings of Breuer and Freud (1893-1895) to refer to the "splitting of consciousness," thus relating it to the intrapsychic world. According to Grotstein's (1981) historical analysis, the term was later used by Klein and Fairbairn, and further developed in the work of

Mahler and Kernberg. It is their conceptualization and definition, Kernberg's in particular, will be used here.

Kernberg (1976) conceptualizes the mechanism of the "primitive" splitting defense in the following terms:

> Splitting is a mechanism characteristic of the first stages of development of the ego. It grows out of the naturally occurring lack of integration of the first introjections and is used as a defense mechanism to protect positive introjections, thereby indirectly fostering ego growth. Splitting consists in dissociating or actively maintaining apart identification systems with opposite valences (conflicting identification systems) without regard to access to consciousness or to perceptual or motor control. The drive derivative attains full emotional, ideational, and motor consciousness but is completely separated from other segments of the conscious psychic experience. In other terms, in the process of splitting, the ego protects itself against anxiety connected with early intrapsychic conflicts (represented by conflicts between introjections and opposite valences) by a regressive nucleation (p. 44).

Kernberg believed that all people use this defense mechanism, to greater and lesser degrees at different periods in their lives, but especially during periods when separation and individuation issues are paramount and object relationships are intensified.

It is theorized that individuals with BPD experience much higher levels of splitting than those with other forms of pathology. They tend to dichotomize themselves and others into distorted images that are either all good or all bad and as a result experience more primitive (either hostile, aggressive, or pleasurable), less modulated affect.

> It is splitting which allows the ego to emerge out of chaos and to order its experiences. This ordering of experience which occurs with the process of splitting into a good and bad object, however excessive and extreme it may be to begin with, nevertheless orders the universe of the child's emotional and sensory impressions and is a precondition of later integration. It is the basis of what is later to become the faculty of discrimination, the origin of which is the early differentiation between good and bad. There are other aspects of splitting which remain and are important in mature life. For instance, the ability to pay attention, to suspend one's emotion in order to form an intellectual judgment, would not be achieved without the capacity for temporary reversible splitting (Grotstein, p. 53).

Grotstein speaks of defensive and non-defensive splitting. He states that it is defensive insofar as it facilitates the ego in disavowing any connection with what has been split off, but it may also be non-defensive.

The second individuation process of adolescence involves a shifting of the nature and quality of the relationships between internal object representations. Different parts of the self remain related, although the relative importance of the parts may change. Similarly, the relationship between the object representations of self, other, and the family do not cease to exist but change in terms of their nature and importance.

CHAPTER III

METHOD

Purpose

There are three primary aims to this study. First, to evaluate the extent to which disturbed object relations and reality testing, splitting, and difficulties with separation and individuation distinguish adolescent girls with borderline personality disorder from adolescent girls with other disorders and normal adolescent girls. Second, to further validate the measures used in this study, especially in terms of their application to the adolescent population. And, third, to provide empirical support for several theories on the etiology of BPD. The methods in this section will provide empirical evidence to either support or bring into question the study's experimental hypotheses. The overriding concern of this study will be to glean some understanding about the complex issue of BPD in adolescence.

Research Questions

To demonstrate that adolescent girls who meet the criteria for borderline personality disorder show significantly more splitting, difficulties in separation and individuation, and problems with object relations and reality testing than do normal adolescent girls and adolescent girls with other disorders; and to determine if normal and other-disordered adolescent girls can also be discriminated on these dimensions, the following hypotheses were tested:

1.1 The borderline group will exhibit significantly higher levels of splitting in comparison to the normal group.

1.2 The borderline group will exhibit significantly higher levels of splitting than the other-disordered group.

1.3 The other-disordered group will exhibit significantly higher levels of splitting than the normal group.

2.1 The borderline group will exhibit significantly more difficulties with separation and individuation than the normal group.

2.2 The borderline group will exhibit significantly more difficulties with separation and individuation than the other-disordered group.

2.3 The other-disordered group will exhibit significantly more difficulties with separation and individuation than the normal group.

3.1 The borderline group will exhibit significantly poorer object relations and reality testing than the normal group.

3.2 The borderline group will exhibit significantly poorer object relations and reality testing than the other-disordered group.

3.3 The other-disordered group will exhibit significantly poorer object relations and reality testing than the normal group.

Participants

For the purposes of this study, three adolescent groups were sampled. The borderline and other disordered groups were drawn from a restricted residential environment (a residential treatment center or foster care setting) and were receiving treatment (psychotherapy and/or psychotropic medication). The normal adolescent group was drawn from a high school, lived at home in an unrestricted environment, and were not receiving treatment. All subjects were adolescent girls from 13 to 18 years of age. The sample was limited to females,

because 75 percent of persons who meet the criteria for BPD are female (DSM-IV-TR, 2000). There was not a standard time interval between length of time in residential treatment and participation in the study. Exclusion criteria for the two clinical groups included current predominance of psychotic thought or manic episode, evidence of neuropathology, IQ less than 75, or medical problems that complicated the diagnosis.

The Diagnostic Interview for Borderlines-Revised (DIB-R) (1983) was used to differentiate adolescents with BPD from non-borderline adolescents in the residential treatment or foster care settings. Adolescents obtaining a DIB-R score greater than or equal to 8 were defined as meeting the criteria for BPD and placed in the borderline group, while those receiving a score of 5 or less composed the other-disordered group. Those obtaining a score of 6 or 7 on the DIB-R were eliminated due to difficulties distinguishing them from someone with BPD. In adults, a score of 7 indicates the existence of borderline pathology, whereas the cut-off score in adolescence is 8.

The borderline and other disordered groups were obtained from residential treatment and foster care settings in the state of Texas that provide housing, care, and treatment to adolescent girls who have been placed in their custody by Child Protective Services (CPS). CPS caseworker consent and individual, adolescent assent was obtained prior to each adolescent's participation in the study. The individual therapist and house parent for each participant was also contacted and asked about the appropriateness of each girl's participation. If any

concerns arose prior to participation (e.g. the girl was having a “bad day”) the meeting was postponed or cancelled. The CPS caseworker, therapist, and the girls were made aware of the nature of the study, that participation was voluntary, that they could request breaks as needed, and that they could quit the study at any time. They were also informed that confidentiality was limited and that any discovery of abuse and neglect and/or intent to harm self or other would be reported to the appropriate authorities. The subjects were also told that the information gathered could be accessed by their therapist, caseworker, or guardian because of their age. Subjects received a snack (orange juice and a can of mixed nuts) during their participation.

The normal adolescent group included 33 participants who were obtained from a high school in the Austin area. Adolescent girls from 13 to 18 years of age were made aware of the study by their teacher, who announced the opportunity to the students in her class. Both individual assent and parental consent was obtained prior to participation in the study. Consent forms discussed the nature of the study, stressed voluntary participation, discussed that breaks would be provided as needed, and informed subjects that participants could quit at any time. The subjects were informed of the limitations of confidentiality, which stated that any discovery of abuse and neglect and/or intent to harm self or other would be reported to the appropriate authorities. The girls were also told that their parents or guardian(s) could obtain access to their

results, but that this would only be provided upon request. Participants received extra credit toward their course grade for their participation.

Instruments

The Diagnostic Interview for Borderlines (DIB-R).

The DIB-R is a semi-structured interview designed to collect information about four different areas of diagnostic importance for Borderline Personality Disorder: affect, cognition, impulse action patterns, and interpersonal relationships. It is the most widely used research instrument for diagnosing BPD (Gunderson, Kolb, and Austin, 1981). The DIB-R requires approximately 50 to 90 minutes to conduct (Gunderson et al., 1981) and consists of 124 items which are answered either yes (= 2), no (= 0), or probable (= 1). Each item is added into multiple summary statement scores that indicate certain areas of problematic functioning. These summary scores are then added together by section to provide a scaled score for each content area. The final score, a possible 0-10, results from the addition of these scaled section scores. A final score of 8 or greater (7 in adults) is considered indicative of BPD in adolescence.

The DIB-R is a well-validated instrument which has been shown to distinguish borderlines with sensitivity and specificity typically above .80 (Armelius, Kullgren, Rosenberg, 1985; Francis, Clarkin, Gilmore, Hurt & Brown, 1984; Tarnopolsky & Berelowits, 1987). Construct validity for the five sections of the earlier DIB was supported by a series of factor analyses (Gunderson et al., 1981). Tests of concurrent criterion validity have shown high agreement with

other measures of BPD: DSM III Diagnosis (Francis et al., 1984; Kernberg, Goldstein, Carr, Hunt, & Barr, 1981; Kolb & Gunderson,1980 Loranger, Oldham, Russakoff & Susman, 1984), psychological testing (Kernberg et al., 1981; Kolb & Gunderson, 1980), structural diagnoses (Kernberg et al., 1981), and a modified Schedule for Affective Disorders-SADS (Loranger et al., 1984). The DIB has consistently demonstrated good interrater agreement (Soloff & Ulrich, 1981; Gunderson, Kolb, and Austin, 1981) and good test-retest reliability over a two-week time span (Cornell, Silk, Ludolph, and Lohr, 1983). Research suggests that the DIB covers a somewhat broader spectrum than the DSM-III-R definition of BPD (Collins & Glassman, 1992).

Zanarini and Gunderson (1989) revised the DIB to sharpen its ability to differentiate between BPD and other personality disorders. The measure is now able to reliably diagnose a more severe subset of borderline patients than interviews based on DSM BPD criteria (Zanarini,et. al., 2002). These revisions included dropping the social adaptation section of the DIB because it added little to the ability of the DIB to discriminate BPD from other diagnostic groups and adding certain symptom areas thought to be of clinical importance (i.e., anxiety to the affect section, odd thinking/unusual perceptual experiences and quasi-psychotic thought to the cognition section, and abandonment, engulfment, and annihilation concerns to the interpersonal section) (p.271).

As stated earlier, the DIB-R uses a more conservative score of 8 (7 in adults) to distinguish adolescents with BPD from other adolescents. This cut-off

criterion has been applied in the research on BPD in adolescence most often, although a score of 7 has sometimes also been used. Most studies (e.g., Ludolph et al., 1990; Weston, 1990) use the more conservative score, however. There is also a general consensus to eliminate 6 and 7 scores, although this is also not always applied. For example, one study used the 7 score and only eliminated the 6 scores. The criterion used in this study was therefore to use the conservative scores of 8 and above to indicate the presence of BPD in adolescence, and to eliminate anyone who received scores of 6 and 7. The normal and other disordered adolescents fell between 0 and 5.

Splitting Index (SI)

The Splitting Index is a self-report scale designed to measure the defense mechanism of splitting as described by Kernberg (1967, 1975, 1976). The 24-item index contains items that are rated on a Likert-type scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). .

Research by Gould (1993), the developer of the SI, provided significant validity and reliability for the SI. Factor analyses revealed a 24-item scale with three 8-item subscales, measuring the splitting of self, family, and others' images. The SI and its subscales were demonstrated to be internally consistent, and convergent validity was supported by significant correlations with measures of borderline and narcissistic personality disorders, self-image stability, self-esteem, depression, and negative affectivity. Discriminant validity was demonstrated by

near-zero correlations with two measures of cognitive complexity (Gould, Prentice, and Ainslie, 1996).

Armbrust (1996) further validated the SI on an outpatient population. Defensive operations centering around splitting were found to be associated with patients having more severe forms of psychopathology. These patients also reported object relations deficits and separation-individuation difficulties. In addition, the SI was able to differentiate a group of patients with borderline personality characteristics and a group with other severe psychopathology from a group with less severe pathology and a non-clinical control group.

Bell Object Relations and Reality Testing Inventory (BORRTI).

The Bell Object Relations and Reality Testing Inventory (BORRTI) (Bell, Billington, and Becker, 1986) is a reliable and easily administered self-report instrument which provides an assessment of dimensions of object relations and reality testing as related to ego functioning. The inventory consists of 90 descriptive statements: 45 relate to various levels of object relations functioning and 45 to reality testing functioning. Items are in a true/false format, require no more than a sixth-grade reading level, and are designed to be answered in terms of recent experience. Scoring yields four object relations subscales: Alienation, Insecure Attachment, Egocentricity, and Social Incompetence; and three reality testing subscales: Reality Distortion, Uncertainty of Perception, and Hallucinations and Delusions.

The BORRTI was standardized on clinical and non-clinical samples, including psychiatric inpatients and outpatients, community active adults, and undergraduate students. The authors report that the scales are free of sex, gender, or social desirability response bias. The four object relations subscales have demonstrated good internal consistency with Spearman Brown split-half reliabilities ranging from .78 to .90 and coefficient alphas ranging from .78 to .90 (Bell et al., 1986).

The BORRTI has shown concurrent and discriminant validity through its positive correlations with various measures of pathology and through its ability to differentiate previously identified pathological groups (Bell, Billington, Cicchetti, and Gibbons, 1988; Bell et al., 1986; Bell et al., 1988; Heesacker & Neimeyer, 1990). The BORRTI can be particularly helpful in identifying patients with borderline, narcissistic, and other personality disorders and in assessing clinically relevant reality testing deficits. For example, Bell et al. (1986) reported high alienation, insecure attachment, and egocentricity scores for a borderline sample. This is consistent with the theoretical description of severe object relations disturbance characteristically found in this population.

Bell and his colleagues further reported that elevated scores on the Alienation subscale best differentiated borderline personality disorder from affective disorders, mixed personality disorders, or schizophrenia (1986). The BORRTI discriminated between a borderline sample and a sample with other personality disorders by showing moderately lower alienation and insecure

attachment scores. The BORRTI also discriminated between the other personality disorders sample and a non-clinical sample by showing higher overall scores for the former (Bell et. al., 1986).

Separation Individuation Questionare (SIQ).

This measure was developed by Christenson and Wilson (1985) to assess adult manifestations of pathology in the separation-individuation process. It is based on the theory that separation-individuation disturbances that occur during the rapprochement subphase in early development can play an important role in the later development of borderline personality disorder (Mahler, 1971; Kernberg, 1975; Rinsley, 1980).

The SIQ is a 39-item inventory covering various aspects of differentiation, splitting, and relationship issues associated with separation-individuation disturbances. Subjects are asked to rate how characteristic each statement is either of themselves, or of people in general, on a 10-point rating scale. A high rating score is indicative of pathology, except for three items in which a low score is indicative of disturbance. The score of these items is reversed in the scoring process so that a high score is associated with a pathological response for all the items. A total score above 190 is considered indicative of separation-individuation pathology.

In the original validation study of the SII by Christenson and Wilson (1985), 65 items were given to two groups: one diagnosed as meeting the DSM-III criteria for BPD and the other a control group. The 39 items that effectively

discriminated between the two groups were retained. Factor analysis of the 39 items revealed only one major factor that accounted for 49 of the common variance. The coefficient Alpha was .91, which indicates that the test has high internal reliability.

The fact that patients with BPD score much higher on the SII than normal control groups lends validity to the inventory. Face validity is reflected by items in the inventory which relate to the clinical manifestations associated with separation-individuation pathology. Questions that tap into a fragile identity structure that is threatened when others are too close or too distant have the highest discriminant validity.

Procedures

Subjects were collected and assessed until there were 21 in the borderline group, 17 in the other-disordered group, and 33 in the normal group. The Diagnostic Interview for Borderlines-Revised was administered to the subjects by the Principal Investigator and three graduate student research assistants who are graduate students in psychology. The research assistants received training in the administration of the DIB-R by the Principal Investigator and achieved interrater reliability of .80 (kappa). These administrators were also trained to administer the SI, SIQ, and BORRTI self-report measures. These measures were given to the subjects to complete following the administration of the DIB-R. In some instances, the self-report measures were read to the subjects. Administrators were blind to the study and received $100.00 in compensation.

The intent of these procedures was to test the research questions as stated above and to demonstrate that adolescents who meet the criteria for BPD have higher degrees of splitting, more disturbances in the separation and individuation process, and more problematic object relations than the other two groups. There was also an interest in seeing if the other-disordered group differed significantly from the normal group on these dimensions.

Miscellaneous qualitative data and demographic variables were collected from chart reviews and the DIB-R interviews for the purpose of examining information relevant to the discussion section and future areas of investigation.

Analyses

For the purposes of this study there were three groups (a borderline adolescent group, an other-disordered adolescent group, and a normal adolescent group) that acted as the independent variables. There were twelve dependent variables: level of borderline pathology, splitting, separation/individuation, object relations (including an alienation subscale, an insecure attachment subscale, an egocentricity subscale, and a social incompetence subscale), and reality testing (including a reality distortion subscale, an uncertainty of perception subscale, and a hallucinations or delusions subscale).

Hypotheses were tested by conducting a series of ANOVAS, one for each dependent measure. The significance level was fixed at .05 for the measures that assess borderline pathology and separation and individuation, while on the

splitting measure, alpha was divided by three because of the three subscales contained in the measure (.05/3 = .0167). On the object relations and reality testing measure alpha was divided by 3 (.05/3 = .0167) and 4 (.05/4 = .0125) respectively, due to the number of subtests in each measure. To protect Type 1 error and validate significant differences, a Tukey HSD was used.

CHAPTER IV

RESULTS

Chapter IV presents the results of the study. Data were analyzed with the SPSS 13.0 statistical package (SPSS Inc., 2004). The results are organized according to the dependent variables: borderline pathology, splitting, separation/individuation, object relations, and reality testing. Two of the measures have subscales. The Splitting Index is comprised of Splitting of Self, Splitting of Family, and Splitting of Other. For the purposes of this study, the Total Splitting Score was analyzed, as is consistent with the instructions provided by the author (Gould, 1993). On the Bell Object Relations and Reality Testing Inventory, Object Relations is composed of Alienation, Insecure Attachment, Egocentricity, and Social Incompetence; while Reality Testing is composed of Reality Distortion, Uncertainty of Perception, and Hallucinations and Delusions.

There were significant differences on all the dependent variables with the exception of Social Incompetence in the area of Reality Testing. A series of one-way ANOVAs were performed on the twelve dependent variables (i.e., DIB-R score, self-splitting, family splitting, other splitting, separation/individuation, alienation, insecure attachment, egocentricity, social incompetence, reality distortion, uncertainty of perception, and hallucinations or delusions). In each case the mean scores in the three conditions (normal, other-disordered, and borderline) were compared. The ANOVAs were followed by a series of Tukey

HSD post-hoc tests to determine which means were significantly different from one another.

Borderline Personality Disorder

A comparison of the mean ratings on the Diagnostic Interview for Borderlines, Revised revealed a statistically significant effect, F (2, 68) = 230.04, MSE = 1.67, p = .0001. Participants in the borderline group (M = 8.90) differed significantly in terms of degree of borderline psychopathology compared to participants in the other-disordered group (M = 3.41) and the normal (M = 1.21) group. The normal and other-disordered groups also differed significantly from each other. The Tukey HSD test revealed that all groups significantly differed from one another on the DIB-R.

Total Splitting Score

A comparison of the mean ratings on the Splitting Total Score (comprised of the Splitting of Self, Family and Other subscales) revealed a statistically significant effect, F (2, 68) = 14.62, MSE = .292, p = .0001. Participants in the borderline group (M = 2.96) showed significantly higher levels of splitting on this measure than did participants in the other-disordered group (M = 2.35) and participants in the normal group (M = 2.16). The normal and other disordered groups showed no significant difference in their total splitting scores. The Tukey HSD test revealed that the borderline group was significantly different from the other two, whereas the normal and other-disordered groups did not significantly differ.

Separation/Individuation

A comparison of the mean ratings of separation and individuation revealed a significant effect, F (2, 68) = 42.57, MSE = 1024.04, p = .0001. Participants in the borderline group (M = 190.71) showed significantly higher scores on separation/individuation than did those in both the other-disordered group (M = 117.18) and the normal group (M = 112.42), whereas no significant difference was found between the other-disordered group and the normal group. The Tukey HSD test confirmed that there were no reliable differences between the normal and other-disordered groups, but that the borderline group significantly differed from each of the other two groups.

Object Relations

Alienation A comparison of the mean ratings of alienation revealed a significant effect, F (2, 68) = 17.20, MSE = 49.99, p = .0001. Participants in the borderline group (M = 60.00) showed significantly higher scores on the alienation subscale than did the other-disordered group (M = 52.94) and the normal group (M = 48.42), while no significant differences were found between the other-disordered group and the normal group. The Tukey HSD test confirmed that there were no significant differences between the normal and other-disordered group, but that the borderline group differed significantly from the other two.

Insecure Attachment A comparison of the mean ratings of insecure attachment revealed a significant effect, F (2, 68) = 8.60, MSE = 108.34, p =

.0001. Participants in the borderline group (*M* = 60.00) showed significantly higher scores on insecure attachment than both the other-disordered group (*M* = 47.29) and the normal group (*M* = 49.88). No significant difference was found between the other-disordered group and the normal group. The Tukey HSD test confirmed that there were significant differences between the borderline group and the other two groups but not between the normal and the other-disordered group.

Egocentricity A comparison of the mean ratings of egocentricity revealed a significant effect, *F* (2, 68) = 23.19, *MSE* = 65.40, *p* = .0001. Participants in the borderline group (*M* = 63.52) showed significantly higher scores on the alienation subscale than did those in both the other-disordered group (*M* = 54.12) and the normal group (*M* = 48.15). The normal and other-disordered group also differed significantly in terms of their scores on the egocentricity subscale. The Tukey HSD test confirmed that there were significant differences between the borderline group and the other two groups, but not between the other-disordered group and the normal group.

Social Incompetence A comparison of the mean ratings *M* on the social incompetence subscale showed no significant effect, *F* (2, 68) = 3.624, *MSE* = 70.40, *p* = .032. Participants in the borderline group (*M* = 54.81) performed similarly to those in the other-disordered group (*M* = 48.76) and the normal group (*M* = 49.63) on this subscale. The Tukey HSD test confirmed that there were no significant differences between the three groups. However, there are differences

between the borderline group and the other two groups at the .03 level of significance. This is not enough to be significant for the stringent alpha level set in this subscale, but it is noteworthy.

Reality Testing

Reality Distortion A comparison of the mean ratings of reality distortion revealed a significant effect, F (2, 68) = 27.59, MSE = 51.11, p = .0001. Participants in the borderline group (M = 62.19) received significantly higher scores on the reality distortion subscale than did those in the other-disordered group (M = 54.47) and the normal group (M = 47.42). The other-disordered group also received significantly higher scores of reality distortion than did the normal group. The Tukey hsd test confirmed the significant differences between the three groups.

Uncertainty of Perception A comparison of the mean ratings of uncertainty of perception revealed a significant effect, F (2, 68) = 12.15, MSE = 69.13, p = .0001. Participants in the normal group (M = 47.61) performed about on par with participants in the other-disordered group (M = 49.00), whereas participants in the borderline group showed significantly elevated scores (M = 58.67) compared to both the other-disordered group and the normal group. The Tukey HSD test confirmed that there were no reliable differences between the normal and other-disordered groups, but that the borderline group differed significantly from each of the other two.

Hallucinations and Delusions A comparison of the mean ratings of hallucinations or delusions revealed a significant effect, F (2, 68) = 6.095, MSE = 118.10, p = .004. Participants in the borderline group (M = 54.48) demonstrated a significantly higher score on the hallucinations or delusions subscale than did participants in the other-disordered group (M = 42.29). Surprisingly, comparisons of the normal group (M = 47.42) to the other-disordered and borderline group revealed no significant differences. The Tukey HSD test confirmed that there was a reliable difference between the borderline and other-disordered group, but not between the normal and the other two.

CHAPTER V

DISCUSSION

Implications

This study examined whether or not adolescent girls who meet the criteria for Borderline Personality Disorder can be differentiated from adolescent girls with other disorders and normal adolescent girls. It also looked at whether normal adolescent girls could be distinguished from other-disordered girls. The areas of interest were splitting, separation/individuation, object relations, and reality testing. Based on the literature, these areas were hypothesized to be relevant for adolescents in general, and adolescents who meet the criteria for BPD in particular. It was predicted that significant differences would be found among the three groups, and this held true in each area. The only subscale that did not show any significant results was social incompetence in the area of reality testing.

Borderline Personality Disorder The DIB-R (Zanarini, et. al., 1982) is a semi-structured interview that is designed to measure degree of borderline pathology. The measure was used to divide the borderline and other disordered groups, and to eliminate participants from the normal group who received a score of 6 or higher. The mean scores revealed markedly significant differences between the groups ($p = .0001$) providing ample evidence that this measure can reliably discriminate borderline, other-disordered, and normal adolescent participants from each other.

The results also showed that normal and other-disordered adolescents can be reliably distinguished from each other on the DIB-R. This is interesting in light of the method that was used to divide these two groups. Exclusion criteria for all three groups were: no predominance of psychotic thought (persons with psychotic disorders were also excluded from the final analysis, even though some of these individuals were symptom free), signs of neurological disorders, and an IQ below 75. As stated above, adolescent girls with a score of 6 or 7 were also excluded because it can be difficult to evaluate if someone with this score also has BPD. Adolescent girls in the normal group who self-reported that they were in treatment (pharmacological or psychotherapy) were also excluded. Some of the girls in both groups did achieve higher scores (i.e., 4-5), but the means of the groups still indicated strong differences, suggesting that the DIB-R can also distinguish between normal adolescents and other-disordered adolescents. As predicted, the other-disordered group showed more signs of psychological problems on the DIB-R than did the normal group.

The results achieved with respect to this measure indicate that this is a good instrument to use when attempting to divide groups of adolescents who both meet and do not meet the criteria for borderline personality disorder.

Separation/Individuation The psychoanalytic literature (Blos, 1967; Masterson, 1975; Kernberg, 1978) suggests that adolescence is a time when issues of separation and individuation concerns predominate. It is believed that there is a regression to the separation individuation period of early childhood

when these issues first played a critical role in development. As the adolescent struggles to gain autonomy she is faced with unresolved concerns from the rapprochement subphase. It is theorized that extreme difficulties in the earlier period leave the adolescent vulnerable to borderline psychopathology.

The Separation Individuation Questionnaire was designed to measure difficulties in this area. As predicted, a strikingly significant difference was found between the borderline group and the other two groups ($p = .0001$), lending validity to this measure in terms of its usefulness with the adolescent population, and suggesting that borderline adolescents can be reliably discriminated from normal and other-disordered adolescents on this dimension.

No significant difference was found between the normal and the other-disordered group, suggesting that these two groups cannot be distinguished from each other in terms of separation and individuation difficulties. The childhood histories of borderline patients make this easy to understand. Their pasts are often fraught with early abuse and neglect, in addition to multiple placements and caretakers. Although the clinical sample in this study all had abuse and/or neglect in their background, a large number of studies support the idea that this background is especially severe in borderline adolescents. In addition, all of the girls in the borderline and other disordered groups had at least two placements, the maximum number being 30. Many had failed adoptions and were in and out of foster care. Separations are therefore extremely difficult for adolescents with

these histories, but perhaps more difficult for the ones with BPD, as is suggested by the significant results on this measure.

As the adolescent begins to consolidate a more coherent sense of identity, separation issues should become less problematic. This was supported in the negative correlation between adolescent age and the Separation Individuation Questionnaire (see Table 31). In other words, the older the adolescent, the lower the score achieved on the measure, suggesting that these issues lessen as the adolescent matures.

Use of Splitting in Adolescents Splitting is a normal part of adolescent development and is used as a coping mechanism to deal with anxiety as adolescents struggle to forge their identity in the face of individuation. Splitting is used to keep disavowed parts of self and others separate and to keep intolerable primitive feelings at bay. Masterson finds Kernberg's concept of splitting useful in describing the defense mechanism adolescent's employ in maintaining the separateness of the infantile maternal image. Kernberg (1985) and Masterson (1975) both claim that defensive splitting is one of the essential elements in BPD.

In this research, the Splitting Inventory (Gould, 1993) was used to measure the degree of defensive splitting. In his development of the measure, Gould discovered that splitting occurred on three different dimensions: splitting of self, splitting of family, and splitting of other. These factors comprise the total splitting score. It was hypothesized that adolescents who met the criteria for BPD would split more frequently than other-disordered and normal adolescents.

It was also predicted that other-disordered adolescents would split more than normal adolescents.

As predicted, the total splitting score revealed that borderline adolescents use splitting as a defense significantly more often than other-disordered or normal adolescents. The other disordered adolescents did not differ from the normal adolescents in terms of how much they use this defense mechanism, however. This finding provides empirical support for Kernberg's (1977) theory that adolescents who meet the criteria for BPD can be distinguished in part by their primitive defensive operations (i.e., splitting).

Object Relations and Reality Testing in Adolescents Object relations and reality testing are generally considered to be more problematic for adolescents with BPD than normal or other-disordered adolescents (Kernberg, 1978; Westen et. al., 1990; Block et. al., 1991). This research further validates this theory. In both areas, adolescents who met the criteria for BPD reported significantly more problems than the other two groups. Normal and other-disordered adolescents did not show significant differences in the quality of their object relations, however.

There are four areas (subscales) in the category of object relations: alienation, insecure attachment, egocentricity, and social incompetence. Borderlines differed significantly from the other-disordered and normal adolescents in every area except social incompetence, where there were no significant differences among the groups. In every other area, the borderline

adolescents differed significantly from both the other-disordered and normal groups, even given the very conservative alpha level ($p < .0125$) at which these were calculated. Thus, in the areas of alienation ($p = .0001$), insecure attachment ($p = .0001$), and egocentricity ($p = .0001$), the borderline adolescents differed significantly from the normal and other-disordered adolescents. This is a very robust finding and gives strong empirical support for the idea that adolescents who meet the criteria for BPD can be discriminated by their object relations from normal and other disordered adolescents.

The only area where the adolescents could not be discriminated on this dimension was in the area of social competency. This suggests that adolescents struggle with social competency in general. In the reconstruction of the DIB (Zanarini et al., 1982) to the DIB-R, the items related to social adaptation were removed because research on the DIB revealed that it did not discriminate well in this area. These findings parallel the findings of the current research and suggest that adolescents struggle with social competency on the whole, making it difficult to discriminate them on this dimension.

The normal and other-disordered adolescents did not differ significantly from each other in terms of any of the object relations subscales, suggesting that object relations does not generally discriminate well between normal adolescents and adolescents with other disorders. These results therefore provide strong evidence suggesting that object relations is a highly reliable way to differentiate

adolescents who meet the criteria for BPD from normal and other-disordered adolescents.

The area of reality testing has three dimensions: reality distortion, uncertainty of perception, and hallucinations or delusions. All of the groups differed significantly from each other in the area of reality distortion, including the normal and other-disordered adolescents. This strongly supports the theoretical position of Kerberg (1978) that adolescents with BPD distort reality to a greater degree than do normal and other-disordered adolescents. This finding also strongly suggests that normal and other disordered adolescents can be discriminated on this dimension as well.

The borderline adolescents also differed significantly from the other-disordered and normal adolescents in terms of uncertainty of perception, whereas there were no significant differences between the normal and other-disordered adolescents. This also supports the literature (Blos, 1967; Kernberg, 1978; Ludolph et al., 1990) in terms of the malevolent quality of object relations that is theorized, and to some extent proven, to exist in adolescents who meet the criteria for BPD.

In the area of delusions and hallucinations, the borderline adolescents differed significantly from the other disordered adolescents, but not from the normal adolescents. This was an odd finding. Upon a closer inspection of the BORRTI data for the normal group, it was found that the higher scores generally fell into a category called IA (Insecure Attachment) which is described in the test

report as “the most common pathological profile found among high functioning adults and students. It may indicate attitudes and personality traits most commonly associated with dependent, compulsive, or passive aggressive personality disorders and may not be so severe as to cause social dysfunction.” The normal and other-disordered adolescents did not differ in this area. Upon a closer inspection of the items, the higher scorers in the normal group tended to answer a grouping of questions whose meanings are not necessarily pathological (e.g., “Sometimes I have dreams so vivid that, when I wake up, it seems like they really happened”).

All adolescents struggle with the developmental demands of maturation and the societal demands of emerging adulthood. This struggle involves challenges in the areas of separation and individuation, object relations and reality testing, and the defensive use of splitting. The literature supports the idea that adolescents who meet the criteria for BPD can be distinguished by the degree of difficulty that they have in each of these areas. The results of this study suggests that severe problems in these areas are exclusive to adolescents who meet the criteria for BPD, and that they can therefore be used to differentiate these adolescents from normal adolescents and adolescents with other disorders.

Summary and Directions for Future Research

This study was conducted to begin to fill the gap that exists in the literature on high risk children, many of whom are vulnerable to developing borderline

personality disorder. As the leading researcher in the area of BPD, Mary M. Zanarini stated in 1997, “Studying children at high risk for developing BPD will best explain the etiology of BPD” (p. 101). Joel Paris (2003), one of the foremost experts on personality disorders, also recognized this need when he stated, “Ultimately, we hope to study a population of children in which adversity such as trauma and neglect are common, and then follow them prospectively over time” (p.40). Few systematic studies of BPD in adolescence have been carried out and the validity in this age group remains an open question in dire need of an answer.

This research is critical first and foremost because of the incredible suffering that is part of the day-to-day existence of these adolescents. In most cases, they have experienced severe abuse and neglect and been taken away by the state from their parents and siblings. They are poor. Most of them have had years of psychotherapy and pharmacotherapy. Most cannot trust or attach to others due to a lifetime of negative experiences of abandonment, abuse, and neglect. The cohort for this study had all been in at least two placements, the highest being 30. Many have failed adoptions and failed foster care situations where they are sometimes re-victimized. All have multiple diagnoses and sometimes struggle with conditions like bipolar disorder that further complicate their ability to cope with life.

Accordingly, this research was also intended to provide further information about the symptomotology and presentation of adolescents who meet the criteria

for BPD compared to other-disordered and normal adolescents. In addition, it was intended to test the hypotheses that the classical intrapsychic concepts of splitting, separation/individuation, and object relations and reality testing are concepts that can be used to differentiate these groups from one another.

These observations have been supported by systematically conducted research with empirical findings that physical and sexual abuse are common in children and adolescents with borderline pathology (Goldman, et. al., 1993; Zanarini, 2000). The most common of these is childhood sexual abuse, which is reported by 40-71 percent of inpatients with BPD (Zanarini, 1989/1997; Ogata, et al, 1990; Paris, et al, 1994; Shearer, et al, 1990; Westen, 1990).

To date, there have been no studies conducted on a population in which adversities such as trauma and neglect are common, outside of an inpatient hospital setting (Paris, 2003, p. 40). Studies like this have been avoided due to practical and legal considerations. It is ethically problematic to conduct both quantitative and qualitative research on abused children whose identity is protected under law.

Protection of privacy makes it difficult to identify children at risk and to follow them prospectively. This study was conducted on a cohort referred to a child protection agency because of abuse and neglect. Obtaining access to this population took years of convincing the director of Child Protective Services in Texas, the University of Texas Institutional Review Board, each and every caseworker, the Clinical Directors and therapists of each site, the Executive

Directors and Chief Executive Officers of each site, the house-parents, and the girls themselves that this research was valuable and important. It took calling every public school in Central Texas, only to have one accept, after the interested teacher had two lengthy conversations with the reluctant school principal. Finally, the parents of the high school girls had to give their consent and the girls had to agree to participate.

Yet, studying this population allows for more definitive statements about which at risk children are vulnerable to personality disorders and other disorders in adulthood and the impact the history variables have on later development. Research on etiological variables also shows that most borderline adolescents have histories of abuse and neglect and multiple caretakers. Out of the girls I met with, 71 percent met who the criteria for BPD, and 65 percent of the other-disordered adolescents, had experienced sexual abuse in addition to emotional abuse and neglect. Between 52 and 59 percent had experienced physical abuse and neglect, and all had lived in multiple treatment settings. All of the facilities that agreed to participate in this study primarily house and treat adolescents who have been taken away from their families by Child Protective Services. One of them also specializes in treating adolescents who have been sexually abused, which partly accounts for the prevalence of BPD in this population.

A practical interest in treatment and prevention requires that we have effective means for identifying individuals at risk before the full onset of the disorder occurs and stabilizes. In order to understand the etiology of BPD more

fully, there must be additional empirical studies of the condition, including longitudinal ones, in children at high risk. Research on high-risk samples can serve two major functions: 1) to provide evidence regarding precursors of a psychological condition which can aid in early identification of groups at risk, and 2) to permit evaluation of etiological hypotheses which are difficult to test once the full-blown psychopathological condition is manifest.

If we indeed want to help these children, the results of this study indicate that earlier identification of groups and individuals at risk and a better understanding of etiological issues are vital. Although studies on this population may be difficult, they are nonetheless essential to both a better theoretical understanding of the sources and manifestations of BPD, and to possible treatments based on the intrapsychic phenomena.

Limitations of Current Findings

There are several limitations to this study. Although it was fortunate to be able to sample a cohort of adolescents who have abuse and neglect in common, this is also a limitation of the study in the sense that it skews the research sample. All of the adolescent girls in the clinical sample were from residential treatment or foster care settings and all had been taken away from their families by Child Protective Services. All were low SES, with no exception. The groups would probably have been more representative had they been more randomly sampled. On the other hand, the commonality of history and circumstance among the two clinical groups is also what makes these results so significant.

There are clear differences between the borderline adolescent girls and the other-disordered adolescent girls in each area, even given their similarities in their background.

The comparison (normal) group was drawn from a high school in the Central Texas area and was comprised mostly of moderate to high achieving adolescents from middle income families. One must therefore question how well the three groups would discriminate if they had been more similar on these demographics. The Principal Investigator obtained permission to sample a group of adolescents from a recreation center in a lower income area in Central Texas, but experienced great difficulty with obtaining enough participants (the "session" had not begun and attendance to different activities was too small to allow for recruitment of a large enough group to make data collection from this facility worthwhile). It would be valuable to obtain such a comparison group in future studies.

The correlation matrix (Table 31) reveals strong relationships between the various measures used in the study. It is therefore important to question whether some of these measures might not be measuring similar concepts. The intrapsychic constructs captured by the measures are closely related, but also speak to different, but interrelated, concepts that have been somewhat artificially teased apart by theorists. Research has shown, however, that these concepts do differ. For example, splitting is a defense mechanism that is utilized while the adolescent is attempting to create more realistic images of his parents, which will

provide for healthier object relatedness and better reality testing. It would be a worthwhile study, however, to do an item analysis on the items in the measures in an attempt to understand ways in which the measures might be measuring similar parts of the concepts.

Another limitation is that the DIB-R actually excluded some subjects who were dual-diagnosed with bipolar disorder and BPD. Although not stated explicitly in the directions, the Principal Investigator was later told in a conversation with the designer of revised version of the DIB-R (Zanarini, 1982) that this measure can be problematic in sorting out Bipolar Disorder from BPD. The methods used in this study did not account for this unanticipated difficulty, and a few people who would otherwise have been included in the borderline group were eliminated because they received a score of 6 or 7 on the DIB-R. Another measure could perhaps have been used to sort out this difficulty. This is a limitation of the measure itself.

The sample sizes for this study were somewhat small (N = 21 for the borderline adolescent group, N = 17 for the other disordered group, and N = 38 for the normal group). Larger sample sizes would make these results more robust. It is important to note that the findings were strong in spite of this in addition to the very conservative alpha levels used to calculate significance.

Furthermore, it is important to recognize that this dissertation is limited in the sense that it emphasizes specific theoretical positions. An adolescent with borderline personality disorder is embedded in a family, a culture and a history,

and it is obvious that these determinants of BPD need to be explored further in order to more fully understand the complex etiology of BPD. The theories outlined in this dissertation are limited in that they adhere primarily to an object relations, and therefore intrapsychic perspective of the etiology of borderline personality disorder. Object relations theory was used because of the rich and extensive literature describing the complex developmental pathway leading to BPD and because of the developmental nature of personality disorders themselves. Moreover, several current theories were used to add to the understanding provided by these classical theories and to bring into relief the impact that external, environmental factors have on the development of BPD. Empirical research was frequently cited to give credibility to both the earlier and later theories.

In spite of these limitations, the findings in this study are very robust and give strong evidence that adolescents who meet the criteria for BPD can be differentiated from normal and other disordered adolescents in terms of splitting, separation and individuation, object relations, and reality testing.

Applications of the Measures to Adolescents

As was hoped, all of the measures used in this study revealed significant differences between the adolescent girls who met the criteria for BPD and the normal and other-disordered adolescent girls on the concepts being measured. This gives strong empirical support to the theory that splitting, separation and individuation, object relations, and reality testing are useful constructs on which

to focus when trying to understand and distinguish borderline pathology in the adolescent population. Each area contained findings that provide strong support for the theories proposed by Kernberg, Mahler, and Blos.

Each measure has been used previously with adolescents but not with great frequency. The DIB-R is the exception. It has been well validated empirically with this age group and has been used in numerous studies to discriminate adolescents who meet the criteria for BPD in inpatient settings. The infrequent use of the other measures with adolescents, however, makes it important to evaluate the appropriateness of these measures for future use with adolescents.

All of the measures were easily understood by adolescents within the age range sampled in this study (13 to 18 years). A few of the questions were inappropriate (e.g., one question on the DIB-R asks, “During the past two years have you gone on any gambling sprees where you spent a lot of money on things that you didn’t need or couldn’t afford?” Although one adolescent answered “yes” to this question, explaining that she and her friends regularly played a dice game where they bet money, gambling is clearly not normative in this age group.) Overall, the DIB-R was easily understood and little clarification was needed on the items.

The Splitting Index was able to discriminate significantly between the borderline adolescents and the other-disordered and normal adolescents. One reason is perhaps that the clinical sample all shared the common experience of

having been taken away from their families by Child Protective Services, making it true that, borderline or not, there were severe problems in the family environment. In summary, the findings on the Splitting Index reveal that adolescents who meet the criteria for BPD can be reliably differentiated from normal and other disordered adolescents by the degree of defensive splitting that they employ.

The Separation Individuation Questionnaire was also able to discriminate significantly between borderline adolescents and other-disordered and normal adolescents. This measure has a cutoff score of 190 which, according to its designers Christenson and Wilson (1985), indicates severe separation individuation pathology. The average mean for the borderline group was 190.71, suggesting that this measure may need to be re-normed on a group of clinically diagnosed and normal adolescents. This research has yet to be done. However, the measure was able to differentiate robustly between the groups, suggesting not only that this is an excellent measure to use for this purpose, but also that adolescents who meet the criteria for BPD can be reliably differentiated according to the severity of problems they experience with separation and individuation.

The BORRTI successfully discriminated between adolescent girls who met the criteria for BPD and normal and other-disordered adolescent girls. This indicates that this is a sound measure to use when attempting to differentiate adolescents in the areas of object relations and reality testing. It also validates

the theory that borderline adolescents can be discriminated by the severity of their disturbance in these areas. The Object Relation's Social Competency subscale did not discriminate well between any of the groups, suggesting that this is perhaps an area that is problematic for many adolescents. This subscale should be observed in future studies with adolescents in an attempt to understand whether it should be removed from the measure. There was also an anomalous finding on the Hallucinations and Delusions subscale that can probably be explained by some of the items on this subscale that do not necessarily indicate pathology. Overall, however, this measure did an excellent job in discriminating the adolescent groups from one another.

In summary, all of the measures successfully discriminated the adolescent girls who met the criteria for BPD from the normal and other-disordered girls. This was done with a very conservative alpha level, in most cases. This has excellent implications for using these measures in future studies with borderline adolescents, in particular. These results also serve to provide strong empirical evidence that these characteristics can be detected and targeted in adolescence such that fewer adolescents enter adulthood with this debilitating condition.

Implications for Clinical Practice It is crucial for clinicians to be able to identify disorders such that treatment can begin as early as possible. There exists a great deal of controversy over whether or not to diagnose personality disorders in childhood and adolescence because the personality has not yet developed fully. The criteria are therefore quite strict and most clinicians tend

toward being very conservative, usually diagnosing traits or features on Axis II. As stated earlier, some researchers have suggested adding the diagnosis "Multiple Complex Developmental Disorder" as a precursor to BPD. This is a much more descriptive term that would take away the labeling quality that BPD has. Whether or not one diagnoses the disorder, what is most important is that the symptoms are recognized and treated.

The significant results garnered in this study provide the clinician with a clearer understanding of what intrapsychic phenomena need to be recognized. These phenomena are in many ways reflections of what has happened to these adolescents during the course of their development. In order to really understand the etiology of BPD one must grasp the internal and external factors that have led to the development of the disorder itself. In this case, I have tried to provide some understanding of the complexity that is BPD in adolescence. Only with this understanding can we provide the multimodal treatment that is required to produce real change and begin to heal the deformed and sometimes shattered personality that exists intrapsychically. Some of this treatment is already underway. Until an even fuller understanding is reached, we will continue to see many different perspectives attempting to explain this complicated diagnosis.

TABLES

Diagnostic Interview for Borderlines

Table 1

Descriptives

Total Score on DIB

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	1.2121	1.29319	.22512	.7536	1.6707	.00	4.00
Other Disordered	17	3.4118	1.62245	.39350	2.5776	4.2460	.00	5.00
Borderline	21	8.9048	.94365	.20592	8.4752	9.3343	8.00	10.00
Total	71	4.0141	3.54761	.42102	3.1744	4.8538	.00	10.00

Table 2

ANOVA

Total Score on DIB

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	767.544	2	383.772	230.042	.000
Within Groups	113.442	68	1.668		
Total	880.986	70			

Table 3

Dependent Variable: Total Score on DIB

Multiple Comparisons

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	-2.19964(*)	.38560	.000	-3.1236	-1.2757
	Borderline	-7.69264(*)	.36055	.000	-8.5565	-6.8287
Other Disordered	Normal	2.19964(*)	.38560	.000	1.2757	3.1236
	Borderline	-5.49300(*)	.42140	.000	-6.5027	-4.4833
Borderline	Normal	7.69264(*)	.36055	.000	6.8287	8.5565
	Other Disordered	5.49300(*)	.42140	.000	4.4833	6.5027

* The mean difference is significant at the .05 level.

Total Splitting Score

Table 4

Descriptives

Total Score on SI

	N	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	2.1577	.55697	.09696	1.9602	2.3552	1.33	3.33
Other Disordered	17	2.3481	.44608	.10819	2.1188	2.5775	1.50	3.17
Borderline	21	2.9633	.57938	.12643	2.6996	3.2270	1.88	3.92
Total	71	2.4416	.63639	.07553	2.2909	2.5922	1.33	3.92

Table 5

ANOVA

Total Score on SI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.525	2	4.263	14.621	.000
Within Groups	19.824	68	.292		
Total	28.349	70			

Table 6

Dependent Variable: Total Splitting

Multiple Comparisons

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.33% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	-.19046	.16119	.468	-.6464	.2654
	Borderline	-.80566(*)	.15072	.000	-1.2319	-.3794
Other Disordered	Normal	.19046	.16119	.468	-.2654	.6464
	Borderline	-.61520(*)	.17616	.002	-1.1134	-.1170
Borderline	Normal	.80566(*)	.15072	.000	.3794	1.2319
	Other Disordered	.61520(*)	.17616	.002	.1170	1.1134

* The mean difference is significant at the .0167 level.

Separation/Individuation

Table 7

Descriptives

Total Score on the SIQ

	N	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	112.4242	25.26241	4.39762	103.4666	121.3819	74.00	160.00
Other Disordered	17	117.1765	20.77629	5.03899	106.4943	127.8587	87.00	160.00
Borderline	21	190.7143	45.99255	10.03640	169.7787	211.6498	103.00	270.00
Total	71	136.7183	47.33322	5.61742	125.5147	147.9219	74.00	270.00

Table 8

ANOVA

Total Score on the SIQ

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	87195.549	2	43597.775	42.574	.000
Within Groups	69634.817	68	1024.041		
Total	156830.366	70			

Table 9

Dependent Variable: SIQ

Multiple Comparisons

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.33% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	-4.75223	9.55350	.873	-27.6432	18.1388
	Borderline	-78.29004(*)	8.93283	.000	-99.6939	-56.8862
Other Disordered	Normal	4.75223	9.55350	.873	-18.1388	27.6432
	Borderline	-73.53782(*)	10.44038	.000	-98.5539	-48.5218
Borderline	Normal	78.29004(*)	8.93283	.000	56.8862	99.6939
	Other Disordered	73.53782(*)	10.44038	.000	48.5218	98.5539

* The mean difference is significant at the .0167 level.

Object Relations: Alienation

Table 10

Alienation Score

Descriptives

	N	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	48.4242	7.86619	1.36933	45.6350	51.2135	31.00	60.00
Other Disordered	17	52.9412	7.18915	1.74362	49.2449	56.6375	35.00	66.00
Borderline	21	60.0000	5.44059	1.18723	57.5235	62.4765	48.00	70.00
Total	71	52.9296	8.55123	1.01484	50.9055	54.9536	31.00	70.00

Table 11

ANOVA

Alienation Score

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1719.646	2	859.823	17.202	.000
Within Groups	3399.002	68	49.985		
Total	5118.648	70			

Table 12

Dependent Variable: Alienation

Multiple Comparisons

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.75% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	-4.51693	2.11069	.089	-10.7104	1.6765
	Borderline	-11.57576(*)	1.97357	.000	-17.3668	-5.7847
Other Disordered	Normal	4.51693	2.11069	.089	-1.6765	10.7104
	Borderline	-7.05882(*)	2.30664	.009	-13.8272	-.2904
Borderline	Normal	11.57576(*)	1.97357	.000	5.7847	17.3668
	Other Disordered	7.05882(*)	2.30664	.009	.2904	13.8272

* The mean difference is significant at the .0125 level.

Object Relations: Insecure Attachment

Table 13

Insecure Attachment

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	49.8788	9.51564	1.65646	46.5047	53.2529	30.00	68.00
Other Disordered	17	47.2941	10.59342	2.56928	41.8475	52.7408	30.00	68.00
Borderline	21	60.0000	11.56287	2.52323	54.7366	65.2634	39.00	80.00
Total	71	52.2535	11.48380	1.36288	49.5353	54.9717	30.00	80.00

Table 14

ANOVA

Insecure Attachment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1864.392	2	932.196	8.604	.000
Within Groups	7367.045	68	108.339		
Total	9231.437	70			

Table 15

Dependent Variable: Insecure Attachment

Multiple Comparisons

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.75% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	2.58467	3.10739	.685	-6.5334	11.7028
	Borderline	-10.12121(*)	2.90551	.002	-18.6469	-1.5955
Other Disordered	Normal	-2.58467	3.10739	.685	-11.7028	6.5334
	Borderline	-12.70588(*)	3.39586	.001	-22.6704	-2.7413
Borderline	Normal	10.12121(*)	2.90551	.002	1.5955	18.6469
	Other Disordered	12.70588(*)	3.39586	.001	2.7413	22.6704

* The mean difference is significant at the .0125 level.

Object Relations: Egocentricity

Table 16

Egocentricity

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	48.1515	7.87052	1.37008	45.3608	50.9423	33.00	61.00
Other Disordered	17	54.1176	7.06118	1.71259	50.4871	57.7482	44.00	64.00
Borderline	21	63.5238	9.13027	1.99239	59.3678	67.6799	44.00	77.00
Total	71	54.1268	10.33708	1.22679	51.6800	56.5735	33.00	77.00

Table 17

ANOVA

Egocentricity

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3032.614	2	1516.307	23.185	.000
Within Groups	4447.245	68	65.401		
Total	7479.859	70			

Table 18

Dependent Variable: Egocentricity

Multiple Comparisons

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.75% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	-5.96613	2.41432	.042	-13.0505	1.1183
	Borderline	-15.37229(*)	2.25747	.000	-21.9964	-8.7482
Other Disordered	Normal	5.96613	2.41432	.042	-1.1183	13.0505
	Borderline	-9.40616(*)	2.63845	.002	-17.1482	-1.6641
Borderline	Normal	15.37229(*)	2.25747	.000	8.7482	21.9964
	Other Disordered	9.40616(*)	2.63845	.002	1.6641	17.1482

* The mean difference is significant at the .0125 level.

Object Relations: Social Incompetence

Table 19

Social Incompetence

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	49.0303	7.42245	1.29208	46.3984	51.6622	30.00	64.00
Other Disordered	17	48.7647	9.95948	2.41553	43.6440	53.8854	30.00	67.00
Borderline	21	54.8095	8.47714	1.84986	50.9508	58.6683	30.00	68.00
Total	71	50.6761	8.69938	1.03243	48.6169	52.7352	30.00	68.00

Table 20

ANOVA

Social Incompetence

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	510.283	2	255.141	3.624	.032
Within Groups	4787.267	68	70.401		
Total	5297.549	70			

Table 21

Dependent Variable: Social Incompetence

Multiple Comparisons

Tukey HSD

(I) bordeline group	(J) bordeline group	Mean Difference (I-J)	Std. Error	Sig.	98.75% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	.26560	2.50491	.994	-7.0846	7.6158
	Borderline	-5.77922	2.34218	.042	-12.6519	1.0935
Other Disordered	Normal	-.26560	2.50491	.994	-7.6158	7.0846
	Borderline	-6.04482	2.73746	.077	-14.0774	1.9878
Borderline	Normal	5.77922	2.34218	.042	-1.0935	12.6519
	Other Disordered	6.04482	2.73746	.077	-1.9878	14.0774

* The mean difference is significant at the .0125 level.

Reality Testing: Reality Distortion

Table 22

Reality Distortion

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	47.4242	7.11086	1.23784	44.9028	49.9456	36.00	66.00
Other Disordered	17	54.4706	6.51074	1.57909	51.1231	57.8181	45.00	66.00
Borderline	21	62.1905	7.67867	1.67562	58.6952	65.6858	45.00	73.00
Total	71	53.4789	9.48361	1.12550	51.2341	55.7236	36.00	73.00

Table 23

ANOVA

Reality Distortion

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2820.184	2	1410.092	27.589	.000
Within Groups	3475.534	68	51.111		
Total	6295.718	70			

Table 24

Dependent Variable: Reality Distortion

Multiple Comparisons

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.33% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	-7.04635(*)	2.13432	.004	-13.0829	-1.0098
	Borderline	-14.76623(*)	1.99566	.000	-20.4106	-9.1219
Other Disordered	Normal	7.04635(*)	2.13432	.004	1.0098	13.0829
	Borderline	-7.71989(*)	2.33246	.004	-14.3168	-1.1229
Borderline	Normal	14.76623(*)	1.99566	.000	9.1219	20.4106
	Other Disordered	7.71989(*)	2.33246	.004	1.1229	14.3168

* The mean difference is significant at the .0167 level.

Reality Testing: Uncertainty of Perception

Table 25

Uncertainty of Perception **Descriptives**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	47.6061	9.56863	1.66568	44.2132	50.9989	30.00	70.00
Other Disordered	17	49.0000	7.07990	1.71713	45.3599	52.6401	30.00	57.00
Borderline	21	58.6667	6.95941	1.51867	55.4988	61.8346	44.00	71.00
Total	71	51.2113	9.54675	1.13299	48.9516	53.4709	30.00	71.00

Table 26

ANOVA

Uncertainty of Perception

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1679.286	2	839.643	12.147	.000
Within Groups	4700.545	68	69.126		
Total	6379.831	70			

Table 27

Dependent Variable: Uncertainty of Perception **Multiple Comparisons**

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.33% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	-1.39394	2.48212	.841	-8.4142	5.6263
	Borderline	-11.06061(*)	2.32087	.000	-17.6248	-4.4964
Other Disordered	Normal	1.39394	2.48212	.841	-5.6263	8.4142
	Borderline	-9.66667(*)	2.71255	.002	-17.3386	-1.9947
Borderline	Normal	11.06061(*)	2.32087	.000	4.4964	17.6248
	Other Disordered	9.66667(*)	2.71255	.002	1.9947	17.3386

* The mean difference is significant at the .0167 level.

Reality Testing: Hallucinations and Delusions

Table 28

Hallucinations or Delusions **Descriptives**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Normal	33	47.4242	8.71791	1.51759	44.3330	50.5155	30.00	61.00
Other Disordered	17	42.2941	10.52239	2.55205	36.8840	47.7042	33.00	67.00
Borderline	21	54.4762	13.83336	3.01869	48.1793	60.7731	30.00	76.00
Total	71	48.2817	11.63146	1.38040	45.5286	51.0348	30.00	76.00

Table 29

ANOVA

Hallucinations or Delusions

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1439.538	2	719.769	6.095	.004
Within Groups	8030.828	68	118.100		
Total	9470.366	70			

Table 30

Dependent Variable: Hallucinations or Delusions **Multiple Comparisons**

Tukey HSD

(I) borderline group	(J) borderline group	Mean Difference (I-J)	Std. Error	Sig.	98.33% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Other Disordered	5.13012	3.24436	.261	-4.0460	14.3062
	Borderline	-7.05195	3.03358	.059	-15.6319	1.5280
Other Disordered	Normal	-5.13012	3.24436	.261	-14.3062	4.0460
	Borderline	-12.18207(*)	3.54555	.003	-22.2100	-2.1541
Borderline	Normal	7.05195	3.03358	.059	-1.5280	15.6319
	Other Disordered	12.18207(*)	3.54555	.003	2.1541	22.2100

* The mean difference is significant at the .0167 level.

Table 31
Correlation Matrix of Age and Dependent Variables

		Age	DIB-R	SI Total	SIQ	Alien.	Insec. Attach	Egocen-tricity	Social Incomp.	Reality Dist.	Uncert. of Perc.	Halluc. or Del.
Age	r	1	-.384**	-.194	-.371**	-.173	.066	-.245*	.013	-.383**	-.324**	-.114
	Sig.		.001	.105	.001	.149	.583	.039	.916	.001	.006	.343
DIB Score	r	-.384**	1	.535**	.765**	.573**	.497**	.656**	.324**	.652**	.582**	.305**
	Sig.	.001		.000	.000	.000	.000	.000	.006	.000	.000	.010
SI Total	r	-.194	.535**	1	.495**	.514**	.593**	.431**	.325**	.361**	.563**	.248*
	Sig.	.105	.000		.000	.000	.000	.000	.006	.002	.000	.037
SIQ		-.371**	.765**	.495**	1	.525**	.568**	.613**	.445**	.678**	.669**	.441**
	Sig.	.001	.000	.000		.000	.000	.000	.000	.000	.000	.000
Alien.	r	-.173	.573**	.514**	.525**	1	.442**	.421**	.315**	.608**	.466**	.284*
	Sig.	.149	.000	.000	.000		.000	.000	.007	.000	.000	.016
Insec. Attach.	r	.066	.497**	.593**	.568**	.442**	1	.360**	.476**	.390**	.563**	.405**
	Sig.	.583	.000	.000	.000	.000		.002	.000	.001	.000	.000
Egocentricity	r	-.245*	.656**	.431**	.613**	.421**	.360**	1	.249*	.579**	.488**	.184
	Sig.	.039	.000	.000	.000	.000	.002		.036	.000	.000	.124
Soc. Incomp.	r	.013	.324**	.325**	.445**	.315**	.476**	.249*	1	.259*	.290*	.112
	Sig.	.916	.006	.006	.000	.007	.000	.036		.029	.014	.350
Reality Dist.	r	-.383**	.652**	.361**	.678**	.608**	.390**	.579**	.259*	1	.523**	.320**
	Sig.	.001	.000	.002	.000	.000	.001	.000	.029		.000	.007
Uncert. of Perc.	r	-.324**	.582**	.563**	.669**	.466**	.563**	.488**	.290*	.523**	1	.484**
	Sig.	.006	.000	.000	.000	.000	.000	.000	.014	.000		.000
Halluc. or Del.	r	-.114	.305**	.248*	.441**	.284*	.405**	.184	.112	.320**	.484**	1
	Sig.	.343	.010	.037	.000	.016	.000	.124	.350	.007	.000	

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

N = 71 for all cells

Table 32
Demographic Variables

Total N=71	Age	Ethnicity* # %	SES	#Place-ments	Grade #	IQ	Sexual Abuse History # %	Physical Abuse History # %	Neglect History
Borderline group N=21	M= 15.24 S.D.= 1.41	C: 10 48 H: 5 24 AA: 4 19 A: 0 0 I: 0 0 O: 2 10	Low	2+	M= 10.10 S.D.= 1.55	M= 97.38 S.D.= 13.24	Yes: 15 71 No: 2 10 Poss: 4 19	Yes: 11 52 No: 6 29 Poss: 4 19	All
Other-disordered group N=17	M= 15.53 S.D.= 1.18	C: 8 47 H: 5 29 AA: 2 12 A: 0 00 I: 0 00 O: 2 12	Low	2+	M= 10.18 S.D.= 1.38	M= 97.88 S.D.= 9.88	Yes: 11 65 No: 3 18 Poss: 3 18	Yes: 10 59 No: 5 29 Poss: 2 12	All
Normal Group N=33	M= 16.39 S.D.= 0.83	C: 19 58 H: 4 12 AA: 2 06 A: 6 18 I: 0 00 O: 2 06	Middle to Upper	NA**	M= 11.33 S.D.= 0.69	MI***	MI***	MI***	MI***

***Ethnicity:**
C: Caucasian
H: Hispanic
AA: African American
A: Asian
I: Indian
O: Other

****NA=Not Applicable**

*****MI=Missing Information**

Table 33

DSM Diagnoses for Borderline and Other Disordered Adolescent Groups

	Mood Dis.	Anxiety Dis.	Adj. Dis.	Attn. Def. & Disr. Beh	Eating Dis.	Subst. Rel. Dis.	Learn. Dis.	Abuse or Neglect	Rel. Probs.	Pers. Dis. Traits
BPD	18	9	3	17	0	2	2	4	2	4
Other-D	14	9	2	13	1	5	6	6	1	3

BPD Group N=21
Other Disordered Group N=17

APPENDICES

Appendix A

REVISED DIAGNOSTIC INTERVIEW FOR BORDERLINES

(DIB-R)

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and

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For further information concerning the DIB-R, contact the authors at McClean Hospital, 155 Mill Street, Belmont, MA 02178. Revised: September, 1983. Modified: February, 1992.

DESCRIPTION

The revised DIB is a semistructured interview that collects information in four areas thought to be of diagnostic importance for Borderline Personality Disorder: affect, cognition, impulse action patterns, and interpersonal relationships. It rates 97 items concerning how the individual has felt, thought, and behaved during the past two years. The patient is the sole source of information for the vast majority of these items, but a small number permit the use of an additional data source as well. The interview is further divided into 24 subsections and the information gathered from 22 of these subsections is used to rate 22 capitalized statements called SUMMARY STATEMENTS. Each of these statements represents an important diagnostic criterion for Borderline Personality Disorder and is used to assess the presence or absence of this disorder. Information from the other two subsections weighs negatively against a borderline diagnosis (items # 24 and #58) and is used in determining the patient's final score in the affect and cognition sections respectively.

INSTRUCTIONS

1. Probe further if the patient has misunderstood a question or has given an answer that seems incomplete, contradictory, or untrue. Also probe further if a specified set of questions provides insufficient information to rate a Summary Statement.

2. Circle the number that represents the best answer to a question or Summary Statement. Unless otherwise specified, all questions and Summary Statements are rated: 2=YES, 1=PROBABLE, and 0=NO. If a question is not applicable, write N.A. to the right of its scoring set.

3. For each section, add the Summary Statement Scores to obtain a SECTION SCORE.

4. Convert the Section Score to a SCALED SECTION SCORE of 0-2 or 0-3 by following the directions provided at the end of that section.

5. Total the Scaled Section Scores to obtain an overall revised DIB SCORE of 0-10.

6. Use the following guidelines when making a diagnostic assessment at the end of the interview: a revised DIB score of eight or more is considered indicative of Borderline Personality Disorder, while a revised DIB score of seven or less is considered indicative of another clinical syndrome.

BACKGROUND INFORMATION

1. Patient's Code Number:

Patient's Name: _____

2. Status at Time of Interview: 1. Inpatient 2. Outpatient 3. Nonpatient

Date of Interview: _____

Institution: _____

Interviewer's Name: _____

3. Age:

4. Sex: I. Male 2. Female

5. Marital Status: 1. Never Married 2. Ever Married

6. Race: 1. White 2. Nonwhite

7. Education: Years of Completed Schooling:

8. Occupation:
   01. Professional
   02. Managerial
   03. Technical
   04. Clerical/Sales
   05. Skilled Labor
   06. Semiskilled Labor
   07. Unskilled Labor
   08. Student
   09. Houseperson
   10. None

9. Hollingshead-Redlich Social Class: 1-5
(This rating should be based on the education and occupation of the head of the household in which the patient resides if he or she is not financially self-sufficient.)

Before we begin, I want to point out that most of the questions in this interview pertain to the past two years of your life or in other words, the period since (APPROPRIATE MONTH, DAY, AND YEAR). I also want to point out that I'm mainly interested in learning about feelings, thoughts, and behaviors that have been typical for you during this two year period. However, I will be asking you a number of questions about specific behaviors that you may have engaged in only when you were particularly upset or in crisis.

AFFECT SECTION

During the past two years, have you...

Depression

1. ... felt quite down or depressed a lot of the time? (2, 1, 0)
2. ... had any periods when you were very depressed every day for two weeks or more? (2, 1, 0)

3. S.1 THE PATIENT HAS HAD A CHRONIC LOW- GRADE DEPRESSION OR EXPERIENCED ONE OR MORE MAJOR DEPRESSIVE EPISODES. (2, 1, 0)

4. ... felt helpless for days or weeks at a time? (2, 1, 0)
5. How about hopeless? (2, 1, 0)
6. Worthless? (2, 1, 0)
7. Extremely guilty? (2, 1, 0)

8. S.2 THE PATIENT HAS HAD SUSTAINED FEELINGS OF HELPLESSNESS, HOPELESSNESS, WORTHLESSNESS, OR GUILT. (2, 1, 0)

Anger

9. ... felt very angry a lot of the time? (2, 1, 0)
10. How about furious or enraged? (2, 1, 0)
11. ... often been sarcastic? (2, 1, 0)
12. How about argumentative? (2, 1, 0)
13. Quick tempered? (2, 1, 0)

14. S.3 THE PATIENT HAS CHRONICALLY FELT VERY ANGRY OR FREQUENTLY ACTED IN AN ANGRY MANNER (I.E., HAS OFTEN BEEN SARCASTIC, ARGUMENTATIVE, OR QUICK TEMPERED). (2, 1, 0)

Anxiety

15. ... felt very anxious a lot of the time? (2, 1, 0)
16. ... often had tension-related physical symptoms, such as headaches, rapid heartbeat, or excessive sweating? (2, 1, 0)
17. ... been troubled a lot by any irrational fears or phobias? (2, 1, 0)
18. ... had any panic attacks (i.e., massive, disabling anxiety attacks)? (2, 1, 0)

19. S.4 THE PATIENT HAS CHRONICALLY FELT VERY ANXIOUS OR SUFFERED FROM FREQUENT PHYSICAL SYMPTOMS OF ANXIETY. (2, 1, 0)

Other Dysphoric Affects

20. ... felt very lonely a lot of the time? (2, 1, 0)
21. ... How about bored? (2, 1, 0)
22. Empty? (2, 1, 0)

23. S.5 THE PATIENT HAS EXPERIENCED CHRONIC FEELINGS OF LONELINESS, BOREDOM, OR EMPTINESS. (2, 1, 0)

Miscellaneous Item

24. ... often had periods of days or weeks when you felt high or elated for no apparent reason? How about very irritable if anyone crossed you? During these periods, did you believe that you were an important person or that you had special abilities or powers? Sleep less than usual and not feel tired? Talk more than usual? Feel that your thoughts were speeded up? Get distracted more easily than usual? Get involved in a number of extra projects or feel more physically restless than usual? Do impulsive things that were uncharacteristic for you (e.g., go on spending sprees, have affairs, make foolish business deals)? Have other people noticed these episodes? What have they said about them? (Judge whether the patient has had a mood disturbance plus three of other seven criteria.) (Hypomanic Episodes) (2, 1, 0)

---

25. AFFECT SECTION SCORE: _____

Affect Scaled Section Score: 2 if the Section Score is 5 or more (2 each from S.3 and S.5) 1 if the Section Score is 3 or 4, or any other combination of 5 or more. 0 if the Section Score is 2 or less, or if the patient has

experienced repeated clear-cut hypomanic episodes that have been noticed by others.

26. AFFECT SCALED SECTION SCORE: _____

COGNITION SECTION

This section rates disturbed thought (odd thinking, unusual perceptual experiences and nondelusional paranoid experiences), "quasi" psychotic thought, and "true" psychotic thought. "Quasi" psychotic experiences are defined as delusions and hallucinations that are transient, circumscribed, and atypical of psychotic disorders, while "true" psychotic experiences are defined as delusions and hallucinations that are enduring, widespread, and stereotypic of psychotic disorders. In addition, all Summary Statements and all but one question (#57) pertain to substance-free experiences and thus it is crucial to determine whether the experiences described by the patient occurred naturally or under the influence of alcohol or drugs.

During the past two years, have you...

Odd Thinking/Unusual Perceptual Experiences

27. ... been a very superstitious person (e.g. often knocked on wood, thrown salt over your shoulder, avoided walking under ladders)? (Marked Superstitiousness) (2, 1, 0)
28. ... often believed that your thoughts, words, or actions could cause things or prevent them from happening in some special or magical way? (Magical Thinking) (2, 1, 0)
29. ... often had a sixth sense about things that went beyond just being sensitive or perceptive about other people and their feelings? (Sixth Sense) (2, 1, 0)
30. ... often been able to tell what other people were thinking or feeling by using some special or magical power, such as telepathy? Often believed that other people knew what you were thinking or feeling by using this kind of power? (Telepathy) (2, 1, 0)
31. ... often had clairvoyant experiences, like a vision of something that was happening in another place? Frequently been able to foretell the future? (Clairvoyance) (2, 1, 0)
32. ... had any beliefs that you couldn't give up even though people have repeatedly told you they were untrue (e.g., thought that you were fat when you were really underweight)? (Overvalued Ideas) (2, 1, 0)
33. ... repeatedly sensed the presence of a force or person who wasn't really

there? Often misinterpreted things that you've heard or seen (e.g., thought that you heard someone calling your name when it was really some other sound)? (Recurrent Illusions) (2, 1, 0)

34. ... repeatedly felt that you were unreal? Like your body or a part of it was strange or changing in size or shape? As if you were physically separated from your feelings? As though you were viewing yourself from a distance? (Depersonalization) (2, 1, 0)

35. ... repeatedly felt that things around you were unreal? Like they were strange or changing size or shape? As if you were in a dream? As though something like a window was between you and the world? (Derealization) (2, 1, 0)

36 S.6 THE PATIENT HAS BEEN PRONE TO ODD THINKING OR UNUSUAL PERCEPTUAL EXPERIENCES AND ILLUSIONS (DEPERSONALIZATION). (2, 1, 0)

Nondelusional Paranoid Experiences

37. ... often felt very distrustful or suspicious of other people? (Undue Suspiciousness) (2, 1, 0)

38. ... often thought that other people were staring at you? Talking about you behind your back? Laughing at you? (Ideas of Reference) (2, 1, 0)

39…. often thought that people were giving you a hard time or were out to get you? Frequently believed that they've taken advantage of you or blamed you for things that weren't your fault? (Other Paranoid Ideation) (2, 1, 0)

40. S.7 THE PATIENT HAS FREQUENTLY HAD TRANSIENT, NON-DELUSIONAL PARANOID EXPERIENCES (I.E., UNDUE SUSPICIOUSNESS, IDEAS OF REFERENCE, OTHER PARANOID IDEATION). (2, 1, 0)

Psychotic Experiences

Rate each experience: 2=“true" delusions and hallucinations, 1="quasi" delusions and hallucinations, and 0="no” delusions or hallucinations.

41. ... believed that thoughts were being put into your mind by some external force? (Thought Insertion) (2, 1, 0)

42. Thoughts were being stolen from your mind? (Thought Withdrawal) (2, 1, 0)

43. Your thoughts were being broadcast so that other people could actually hear what you were thinking? (Thought Broadcasting) (2, 1, 0)

44. Your feelings, thoughts, or actions were being controlled by another

person or a machine? (Delusions of Passivity) (2, 1, 0)

45. You could actually hear what other people were thinking? They could literally read your mind as if it were an open book? (Delusions of Mind Reading) (2, 1, 0)
46. Other people were plotting against you in some organized way? They were deliberately trying to hurt you or punish you? (Delusions of Persecution) (2, 1, 0)
47. Other people were spying on you or following you? Things were specially arranged for you? You were being sent special messages through the radio or television? (Delusions of Reference) (2, 1, 0)
48. You deserved punishment for something terrible that you've done? (Delusions of Guilt/Sin) (2, 1, 0)
49. That you were an extremely important person? You had very special abilities or exceptional powers? (Delusions of Grandeur) (2, 1, 0)
50. Something terrible had happened or would happen in the future (e.g. the world was coming to an end tomorrow or that your body was dissolving or melting)? (Nihilistic Delusions)
51. Something was wrong with your body or that you had a serious disease? (Somatic Delusions) (2, 1, 0)
52. ... had any other beliefs that other people thought were definitely untrue, strange or even bizarre? (Other Delusions) (2, 1, 0)
53. ... heard any voices or other sounds that no one else heard? (Auditory Hallucinations) (2, 1, 0)
54. ... seen any visions or other sights that no one else saw? (Visual Hallucinations) (2, 1, 0)
55. ... had any other sensory experiences that no one else shared (e.g. repeatedly smelled something or felt something crawling on your body that wasn't really there)? How about any body memories? (Other Hallucinations) (2, 1, 0)

56. THE PATIENT HAS REPEATEDLY HAD "QUASI" DELU- SIONS OR HALLUCINATIONS (2, 1, 0)

Miscellaneous Items

57. … had any of these experiences under the influence of alcohol or drugs? (Substance-Induced Psychotic Experiences) (2="true" experiences, 1="quasi" experiences, and 0=none).

58. … had any periods of a week or more when you felt extremely high or elated for no apparent reason? How about extremely irritable if anyone crossed you? During these periods, did you believe that you were a very important person or that you had very special abilities or powers? Sleep much less

than usual and not feel tired? Talk much more than usual or feel unable to stop talking? Have racing thoughts or complain that your thoughts were racing from topic to topic? Get distracted very easily? Get involved in so many projects that people were concerned or feel much more physically restless than usual? Do a lot of impulsive things that were uncharacteristic for you? Did this condition seriously interfere with your work? How about your home or social life? Did you have to be hospitalized because of a manic episode? (Judge whether the patient has had a sustained mood disturbance, been seriously impaired socially or vocationally during these periods, plus met three of the other seven criteria.) (Manic Episodes) (2, 1, 0)

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59. COGNITION SECTION SCORE: _____

Cognition Scaled Section Score: 2 if the Section Score is 4 or more.
1 if the Section Score is 2 or 3,
0 if the Section Score Is 1 or less,
or if the patient has ever had either
a prolonged/widespread psychotic episode
or a full-blown manic episode.

60. COGNITION SCALED SECTION SCORE: _____

IMPULSE ACTION PATTERNS SECTION

If the answer to any of the following questions is yes, determine the number of times that the behavior occurred. Except where noted (substance abuse, self-mutilation, and suicidal efforts), score each type of impulsivity: 2=5x or more, 1=3-4x, and 0=2x or less.

During the past two years, have you ...

Substance Abuse

61. ... had too much to drink or gotten really drunk? (Alcohol Abuse)
(2=chronic abuse, 1=episodic abuse, 0=no abuse)
62. ... gotten high on prescription or street drugs? (Drug Abuse)
(2=chronic abuse. 1=episodic abuse. 0=no abuse)

63. S.9 THE PATIENT HAS HAD A PATTERN OF SERIOUS SUBSTANCE ABUSE. **(2, 1, 0)**

Sexual Deviance

64. ... impulsively gotten sexually involved with anyone or had any brief affairs? (Promiscuity) (2, 1, 0)
65. ... engaged in any unusual sexual practices (e.g., enjoyed being humiliated or hurt while having sex, preferred watching other people to having sex yourself)? (Paraphilias) (2, 1, 0)

66. S.10 THE PATIENT HAS HAD A PATTERN OF SEXUAL DEVIANCE (I.E., PROMISCUITY OR A PARAPHILIA). (2, 1, 0)

Self-Mutilation

67. ... deliberately hurt yourself without meaning to kill yourself (e.g., cut yourself, burned yourself, punched yourself, put your hand through windows, punched walls, banged your head)? (Self-Mutilation) (2=2x or more, 1 = 1x, 0=none)

68. S.11 THE PATIENT HAS HAD A PATTERN OF PHYSICAL SELF-MUTILATION. (2, 1, 0)

Suicidal Efforts

69. ... threatened to kill yourself? (Suicide Threats) (2=2x or more, 1=1x, 0=none)
70. ... made any suicide attempts, however minor? (Suicide Gestures/Attempts) (2=2x or more, 1=1x, 0=none)

71. S.12 THE PATIENT HAS HAD A PATTERN OF MANIPULATIVE SUICIDE THREATS, GESTURES, OR ATTEMPTS (I.E., THE SUICIDAL EFFORTS WERE MAINLY DESIGNED TO ELICIT A "SAVING" RESPONSE). (2, 1, 0)

Other Impulsive Patterns

72. … had any episodes where you ate so much food that you were in a lot of pain or had to force yourself to throw up? (Eating Binges) (2, 1, 0)
73. ... gone on any spending sprees where you spent a lot of money on things that you didn't need or couldn't afford? (Spending Sprees) (2, 1, 0)
74. ... gone on any gambling sprees where you just kept placing bets even though you were consistently losing money? (Gambling Sprees) (2,1.0)

75. ... lost your temper and really shouted, yelled, or screamed at anyone? (Verbal Outbursts) (2, 1, 0)
76. ... been in any fistfights? (Physical Fights) (2, 1, 0)
77. … threatened to physically harm anyone (e.g., told someone that you would punch him, stab him, or kill him)? (Physical Threats) (2, 1, 0)
78. ... physically assaulted or abused anyone (e.g., slapped, punched, or kicked someone)? (Physical Assaults) (2, 1, 0)
79. ... deliberately damaged property (e.g., smashed dishes, broken furniture, wrecked someone's car)? (Property Damage) (2, 1, 0)
80. ... driven far too fast? How about while you were under the influence of alcohol or drugs? (Reckless Driving) (2, 1, 0)
81. ... done anything that's against the law (e.g., shoplifted, sold drugs, fenced stolen property)? (Antisocial Actions) (2, 1, 0)

82. S.13 THE PATIENT HAS HAD ANOTHER PATTERN OF IMPULSIVE BEHAVIOR. (2, 1, 0)

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83. IMPULSE ACTION PATTERNS SECTION SCORE: _____

Impulse Action Patterns Scaled Section Score:
3 if the Section Score is 6 or more (2 from either S.11 or S.12). 2 if the Section Score is 4 or 5, or any other combination of 6 or more. 0 if the Section Score is 3 or less.

84. IMPULSE ACTION PATTERNS SCALED SECTION SCORE: _____

INTERPERSONAL RELATIONSHIPS SECTION

During the past two years, have you...

Intolerance of Aloneness

85. ... generally hated to spend time alone? (2, 1, 0)
86. ... often made frantic efforts to avoid feeling alone (e.g., talked on the phone for hours at a time, gone out to find someone to talk to)? (2, 1, 0)
87. ... felt very depressed when you're alone? (2, 1, 0)
88. How about very anxious? Angry? Empty? Bad? (2, 1, 0)

89. S.14 THE PATIENT HAS TYPICALLY TRIED TO AVOID BEING ALONE OR FELT EXTREMELY DYSPHORIC WHEN ALONE. (2, 1, 0)

Abandonment/Engulfment/Annihilation Concerns

90. ... repeatedly feared that you were going to be abandoned by those closest to you? (Fear of Abandonment) (2, 1, 0)
91. ... repeatedly feared that you were going to feel smothered or lose your identity if you got too close to other people? (Fear of Engulfment) (2, 1, 0)
92. ... repeatedly feared that you were going to totally fall apart or cease to exist if you were abandoned by someone important to you? (Fear of Annihilation) (2, 1, 0)

93. S.15 THE PATIENT HAS REPEATEDLY EXPERIENCED FEARS OF ABANDONMENT, ENGULFMENT, OR ANNIHILATION. (2, 1, 0)

Counterdependency

94. ... had any jobs where one of your main functions was to take care of other people or animals? (2, 1, 0)
95. ... found yourself constantly offering to help friends, relatives, or co-workers? (2, 1, 0)
96. ... been particularly bothered if other people have tried to help or take care of you? (2, 1, 0)
97. ... refused to ask for support or help when you felt you really needed it? (2, 1, 0)
98. ... had anyone in your life who you felt you really needed? Did your ability to function depend on this person? How about your survival? (2, 1, 0)

99. S.16 THE PATIENT HAS BEEN STRONGLY COUNTER-DEPENDENT OR SERIOUSLY CONFLICTED ABOUT GIVING AND RECEIVING CARE. (2, 1, 0)

Unstable Close Relationships

100. ...had any close relationships? How many? How often did you see these people? Which one was most important to you? (2=4 or more, 1=2-3, 0=1 or less)
101. Have any of these relationships been troubled by a lot of intense arguments? (2, 1, 0)
102. How about repeated breakups? (2, 1, 0)

103. S.17 THE PATIENT HAS TENDED TO HAVE INTENSE, UNSTABLE CLOSE RELATIONSHIPS. (2, 1, 0)

Recurrent Problems In Close Relationships

104. ...tended to feel very dependent on others? Needed a lot of support or actual help in order to function? Ever been told that you're too dependent? (Dependency: the patient has repeatedly been overly dependent on others) (2, 1, 0)
105. ...repeatedly allowed other people to force you to do things that you didn't want to do or treat you cruelly? Ever been told that you let people victimize or abuse you? (Masochism: the patient has repeatedly allowed others to coerce or hurt him) (2, 1, 0)

106. S.18 THE PATIENT HAS HAD RECURRENT PROBLEMS WITH DEPENDENCY OR MASOCHISM IN CLOSE RELATIONSHIPS. (2, 1, 0)

107. ...repeatedly ignored people's good traits and seen only their faults? Ever been told that you're a very critical or devaluative person? (Devaluation: the patient has repeatedly exaggerated the weaknesses and minimized the strengths of others) (2, 1, 0)
108. ...repeatedly tried to get others to do what you wanted them to without actually asking them or telling them what to do? Do you have any manipulative skills? Ever been told that you're very manipulative? (Manipulation: the patient has repeatedly used indirect means to get what he wants) (2, 1, 0)
109. ...repeatedly tried to force others to do things that they didn't want to do or treated them cruelly? Ever been told that you're bossy or mean? (Sadism: the patient has repeatedly tried to coerce or hurt others) (2, 1, 0)

110. S.19 THE PATIENT HAS HAD RECURRENT PROBLEMS WITH DEVALUATION, MANIPULATION, OR SADISM IN CLOSE RELATIONSHIPS. (2, 1, 0)

111. ...repeatedly asked people for things that they couldn't or shouldn't give you? Demanded a lot of their time and attention? Ever been told that you're a very demanding person? (Demandingness: the patient has repeatedly made inappropriate requests) (2, 1, 0)
112. ...repeatedly acted as though you had a right to special treatment? As if people owed you things because of what you've gone through? Ever been

told that you act as though you were entitled to special care or consideration? (Entitlement: the patient has repeatedly exhibited unrealistic expectations) (2, 1, 0)

113. S.20 THE PATIENT HAS HAD RECURRENT PROBLEMS WITH DEMANDINGNESS OR ENTITLEMENT IN CLOSE RELATIONSHIPS. (2, 1, 0)

Troubled Psychiatric Relationships

114. ...been in any (other) individual therapies? How many? (Number Of Individual Therapies) (2=2 or more, 1=1, 0=none)
115. How many months out of the past 24 have you been in individual treatment? (Months Spent In Individual Therapy) (2=12 or more, 1=1-11, 0=none)
116. Did you get a lot worse as a result of this (any of these) therapy(s)? In what way? (Individual Therapy Regression) (2, 1, 0)
117. ...had any (other) psychiatric hospitalizations? How many? (Number of Psychiatric Hospitalizations) (2=2 or more, 1=1, 0=none)
118. How many months out of the past 24 have you been hospitalized? (Months Spent In Psychiatric Hospitals) (2=12 or more, 1=1-11, 0=none)
119. Did you get a lot worse as a result of this (any of these) hospitalization(s)? In what way? (2, 1, 0)

120. S.21 THE PATIENT HAS UNDERGONE A CLEAR-CUT BEHAVIORAL REGRESSION DURING THE COURSE OF PSYCHOTHERAPY OR PSYCHIATRIC HOSPITALIZATION. (2, 1, 0)

121. ...been the focus of any staff conflicts or problems on an inpatient unit? (Judge whether the patient has been the focus of a notable staff countertransference reaction. Other available sources should also be used in making this judgment.) (2, 1, 0)
122. ...had a therapist who got very angry at you? How about who asked you to leave treatment? Was far more involved in your care than most therapists? (Judge whether the patient has been the focus of a notable therapist countertransference reaction. Other available sources should also be used in making this judgment.) (2, 1, 0)
123. ...developed a close friendship or love affair with an inpatient staff member? (2, 1, 0)
124. How about with a therapist? (2, 1, 0)

125. S.22 THE PATIENT HAS BEEN THE FOCUS OF A NOTABLE COUNTERTRANSFERENCE REACTION ON AN INPATIENT UNIT OR IN PSYCHOTHERAPY, OR FORMED A "SPECIAL" RELATIONSHIP WITH A MENTAL HEALTH PROFESSIONAL. **(2, 1, 0)**

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126. INTERPERSONAL RELATIONSHIPS SECTION SCORE: _____

Interpersonal Relationships Scaled Section Score:

3 if the Section Score is 9 or more
2 if the Section Score is 6-8
0 if the Section Score is 5 or less, or if the patient has been an odd, socially isolated loner.

127. INTERPERSONAL RELATIONSHIPS SCALED SECTION SCORE: ____

CONCLUSIONS

1. Affect Section Score: 0-10 **_____**

2. Affect Scaled Section Score: 0-2 **_____**

3. Cognition Section Score: 0-6 **_____**

4. Cognition Scaled Section Score: 0-2 **_____**

5. Impulse Action Patterns Section Score: 0-10 **_____**

6. Impulse Action Patterns Scaled Section Score: 0-3 **_____**

7. Interpersonal Relationships Section Score: 0-18 **_____**

8. Interpersonal Relationships Scaled Section Score: 0-3 **_____**

9. Total Revised DIB Score: 0-10 **_____**

Appendix B

Splitting Index

This questionnaire contains a series of statements a person might use to describe his/her perceptions, opinions, and other characteristics. Please read each statement and decide how much you agree with it. Rate each statement on a scale from 1 to 5. A **1** means that you **strongly disagree** with the statement. A **5** means that you **strongly agree** with the statement. Use the **other numbers** to **demonstrate different "degrees"** along this dimension. For example, a 3 would mean that you neither agree nor disagree with the statement.

____ 1. I feel different about myself when I am with different people.
____ 2. My mother has faults, but I have never doubted her love for me.
____ 3. Being able to keep friends is one of my strong points.
____ 4. My parents always took care of my needs.
____ 5. My feelings about myself shift dramatically.
____ 6. It is impossible to love my parents all the time.
____ 7. The different parts of my personality are difficult to put together.
____ 8. My feelings about my mother change from day to day.
____ 9. My parents did the best they could for me.
____10. I have doubts about my closest friends.
____11. Sometimes I am not sure who I am.
____12. My feelings about myself are powerful, but they can change from one moment to the next.
____13. My friendships are almost always satisfying.
____14. My feelings about myself do not change easily.
____15. I have many long-lasting friendships.
____16. I sometimes feel "pulled apart" by my feelings about myself.
____17. My relationship with my family is solid.
____18. My feelings toward those close to me remain constant.
____19. I have always been aware that my close friends really cared for me.
____20. My opinions of my friends rarely change.
____ 21. I almost always feel good about those close to me.
____ 22. I have extremely mixed feelings about my mother.
____23. My family was often hurtful to me.
____24. Who I am depends on how I am feeling.

Note: Items 2, 3, 4, 9, 13,14, 15, 17, 18, 19, 20, and 21 are reverse scored. "Splitting of Self Images" subscale consists of items 1, 5, 7, 11, 12, 14, 16, and 24. "Splitting of Family Images" subscale consists of items 2, 4, 6, 8, 9, 17, 22, and 23. "Splitting of Others' Images" subscale consists of items 3, 10, 13, 15, 18, 19, 20, and 21.

Appendix C

S-I QUESTIONNAIRE

Name_____

Case number _____ Date _____ Age _____ Sex _____

In this section, you are asked to rate how characteristic the following statements are about people in general. The rating is on a scale of 1 to 10 with 1 being not characteristic and 10 being very characteristic. Your rating is your opinion of how people in general feel about themselves and others. So there are no right or wrong answers. Since people's attitudes about themselves and others vary considerably, the questions vary considerably; some questions may seem a little strange or unusual to you. Please answer all the questions as best you can. Answer them fairly quickly without putting a lot of thought into them. Please circle your answers.

___ 1. When people really care for someone, they often feel worse about themselves.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 2. When someone gets too emotionally close to another person, they often feel lost.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 3. When people really get angry at someone, they often feel worthless.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 4. It is when people start getting emotionally close to someone that they are most likely to get hurt.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 5. People need to maintain control over others to keep from being harmed.
Not 1 2 3 4 5 6 7 8 9 10 Very

In this section you are asked to rate whether you think the following statements are characteristic of your feelings about yourself and other people. The rating is on a scale of 1 to 10 with 1 being not characteristic and 10 being very characteristic. Again, these are your opinions so there are no right or wrong answers. As different people often have very different thoughts about themselves and others, the statements vary considerably. Some of then may seem strange or unusual to you, but please answer all of them the best you can. Race each statement fairly quickly without giving a lot of thought to then. Circle your rating.

___ 6. I find that people seem to change whenever I get to know them.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 7. It is easy for me to see both good and bad qualities that I have at the same time.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 8. I find that people either really like me or they hate me.
Not 1 2.3 4 5 6 7 8 9 10 Very
___ 9. I find that others often treat me as if I am just there to meet their every wish.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 10. I find that I really vacillate between really liking myself and really disliking myself.
Not 1 2 3 4 5. 6 7 8 9 10 Very
___ 11. When I am by myself, I feel that something is missing.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 12. I need other people around me to not feel empty.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 13. I sometimes feel that part of me is lost whenever I agree with someone else.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 14. Like others, whenever I see someone I really respect and to whom I look up, I often feel worse about myself.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 15. I find it easy to see myself as a distinct individual.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 16. Whenever I realize how different I am from my parents, I feel very uneasy.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 17. In my experience., I almost always consult my mother before making an important decision.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 18. I find it relatively easy to make and keep commitments to other people.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 19. I find that when I get emotionally close to someone, I occasionally feel like hurting myself.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 20. I find that either I really like someone or I can't stand them.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 21. I often have dreams about falling that make me feel anxious.
Not 1 2 3 4 5 6 7 8 9 10 Very
___ 22. I find it difficult to form mental pictures of people significant to me.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 23. I have on more than one occasion seemed to wake up and find myself in a relationship with someone, and not be sure of how or why I am in the relationship.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 24. I must admit that when I feel lonely, I often feel like getting intoxicated.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 25. Whenever I am very angry with someone, I feel worthless.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 26. If I were to tell my deepest thoughts, I would feel empty.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 27. In my experience, people always seem to hate me.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 28. Whenever I realize how similar I am to my parents, I feel very uneasy.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 29. Often, when I am in a close relationship, I find that my sense of who I am gets lost.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 30. I find it difficult for me to see others as having both good and bad qualities at the same time.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 31. I find that the only way I can be me is to be different from other people.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 32. I find that when I get emotionally too close to someone, I sometimes feel that I have lost a part of who I am.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 33. Whenever I am away from my family, I feel very uneasy.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 34. Getting physical affection itself seems more important to me than who gives it to me.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 35. I find it difficult to really know another person well.
Not 1 2 3 4 5 6 7 8 9 10 Very

___ 36. I find that it is important for me to have my mother's approval before making a decision.
Not 1 2 3 4 5 6 7 8 9. 10 Very

___ 37. I must admit that whenever I see someone else's faults, I feel better.
Not 1 .2 3 4 5 6 7 8 9 10 Very

___ 38. I am tempted to try to control other people in order to keep them close to me.
Not 1 2 3 4 5 6 7 8 9 10 Very

___39. I must admit that whenever I get emotionally close to someone, I sometimes want to hurt them.
Not 1 2 3 4 5 6 7 8 9 10 Very

Appendix D

CONSENT FORM FOR CASEWORKER

PERSONALITY STUDY OF ADOLESCENT GIRLS

An adolescent youth that is currently under your care is invited to participate in a study attempting to understand personality dynamics during the adolescent period of development. My name is Elisabeth Middleton and I am a Doctoral Candidate in Counseling Psychology at The University of Texas at Austin, Department of Educational Psychology. This study is part of my dissertation research, which is a requirement in my training as a psychologist. I am asking for permission to include this adolescent in my study because she fits the criteria for my subject pool. As the Primary Investigator, I will be the one conducting the research in addition to several research assistants (Lynn Monnat, Joanna Molnar and Theresa Redmond). I expect to have 60 participants in the study.

If you allow this adolescent to participate the researcher will first inform her of the nature of the study and then ask her to sign an assent form. She will be told that she may discontinue her participation at any time and made aware that any information gathered about her will be kept confidential. The procedures consist of one semi-structured interview and three self-report measures, all of which take approximately an hour to an hour and a half to administer. Breaks will be provided as needed. The administration time may be broken up into several sessions, depending on the subject's ability to tolerate the time required to administer and complete the interview and measures. As is required by the Ethical Standards in Psychology and Texas Law, any discovery of abuse or intent to harm self or others must be reported. Should the adolescent feel uncomfortable at any point, she may withdraw from the study, and receive debriefing by the Principal Investigator, one of the research assistants, and/or her treatment team.

Potential risk factors for a participant in this study are that some of the questions/items on the interview and self-report measures might bring into consciousness self-relevant material that is upsetting for her. Several items are rather personal in nature (e.g. "During the past two years, have you…made any suicide attempts, however minor?"). The researcher has worked with adolescent girls in a therapeutic context extensively and is equipped to handle any negative effects that might occur. The clinical staff at the Settlement Home, who is directly responsible for the girls; and the caseworkers, who are also aware of the nature of the study and the methods being used, are prepared to handle any residual feelings the girls might have resulting from the data collection process. The

Primary Investigator will report any adverse effects directly to the University of Texas IRB the day that they occur (unless they occur on a week-end, under which circumstances such events will be reported the following Monday).

The research will be conducted on the premises of the Settlement Home in Austin, Texas. Any information that is obtained in connection with this study and that can be identified with the adolescent will remain confidential and will be disclosed only with your and her permission. Her responses will not be linked to either of you in any written or verbal report of this research project. Your decision to allow her to participate will not affect any present or future relationship with The University of Texas at Austin or the Settlement Home that you or she might have. If you have any questions about the study, please call me at (512)443-7959. If you have any questions or concerns about the adolescent's participation in this study, call Professor Clarke Burnham, Chair of the University of Texas at Austin Institutional Review Board for the Protection of Human Research Participants at (512)232-4383. You may keep the copy of this consent form.

You are making a decision about allowing an adolescent youth that is under your care to participate in this study. Your signature below indicates that you have read the information provided above and have decided to allow her to participate in the study. If you later decide that you wish to withdraw your permission, simply tell me. You may discontinue her participation at any time.

_____
Printed Name of Adolescent Youth

_____ _____
Signature of Parent or Legal Guardian Date

_____ _____
Signature of Investigator Date

Appendix E

PARENTAL CONSENT FORM

PERSONALITY STUDY OF ADOLESCENT GIRLS

Your daughter is invited to participate in a study attempting to understand personality dynamics during the adolescent period of development. My name is Elisabeth Middleton and I am a Doctoral Candidate in Counseling Psychology at The University of Texas at Austin, Department of Educational Psychology. This study is part of my dissertation research, which is a requirement in my training as a psychologist. I am asking for permission to include your adolescent daughter in my study because she fits the criteria for my subject pool. As the Primary Investigator, I will be conducting this research along with several research assistants (Lynn Monnat, Joanna Molnar, and Theresa Redmond) who are graduate students in psychology. I expect to have 60 participants in the study.

If you allow your child to participate the researcher will first inform her of the nature of the study and ask her to sign an assent form. She will be told that she may discontinue her participation at any time and be made aware that any information gathered about her will be kept confidential. The procedures consist of one semi-structured interview and three self-report measures, all of which take approximately one and one half hours to administer. Breaks will be provided as needed. The administration time may be divided into several sessions, depending on her ability to tolerate the time required to administer and complete the interview and measures. As is required by the Ethical Standards in Psychology and Texas Law, any discovery of abuse or intent to harm self or others must be reported. Should your daughter feel uncomfortable at any point, she may withdraw from the study, and receive debriefing by the Principal Investigator or one of the research assistants.

Potential risk factors for a participant in this study are that some of the questions/items on the interview and self-report measures might bring into consciousness self-relevant material that is upsetting to her. Several items are rather personal in nature (e.g. "During the past two years, have you…made any suicide attempts, however minor?"). The Primary Investigator has worked with adolescent girls in a therapeutic context extensively and is equipped to handle any negative effects that might occur. Should any adverse effects occur, they will be reported directly to the University of Texas Institutional Review Board the day that they occur (unless they occur on a week-end, under which circumstances such events will be reported the following Monday) by the Principal Investigator.

The research will be conducted on the premises of Westwood High School in Round Rock, Texas. Any information that is obtained in connection with this study and that can be identified with your adolescent daughter will remain confidential and will be disclosed only with your and her permission. Her responses will not be linked to either of you in any written or verbal report of this research project. Your decision to allow her to participate will not affect any present or future relationship with The University of Texas or Westwood High School that you or she might have. If you have any questions about the study, please call me at (512)443-7959. If you have any questions or concerns about your adolescent's participation in this study, call Professor Clarke Burnham, Chair of the University of Texas at Austin Institutional Review Board for the Protection of Human Research Participants at (512)232-4383. You may keep the copy of this consent form.

You are making a decision about allowing your adolescent daughter to participate in this study. Your signature below indicates that you have read the information provided above and have decided to allow her to participate in the study. If you later decide that you wish to withdraw your permission, simply tell me. You may discontinue her participation at any time.

_____
Printed Name of Adolescent Youth

_____ _____
Signature of Parent or Legal Guardian Date

_____ _____
Signature of Investigator Date

Appendix F

ASSENT FORM

PERSONALITY STUDY OF ADOLESCENT GIRLS

I agree to be in a study about personality development in adolescence. The study concerns the different stages that adolescents go through as they prepare to become adults. The main focus is on how individual differences in development affect the person's ability to cope effectively. This study was explained to my guardian and he/she said that I could be in it. The only people who will know about what I say and do in the study will be the people in charge of the study and my guardian(s) and caseworker. The only exception to this rule is that any discovery of abuse or intent to harm self or others will be reported.

In the study, I will be asked questions about myself and things related to my life. I will then be asked to fill out three questionnaires. Some of these questions are personal and sensitive in nature. I don't have to answer any question which makes me feel uncomfortable. The process will take about an hour and a half. The interviewer will be there with me the entire time so that I can ask any questions I might have. I can take a break at any time.

Writing my name on this page means that the page was read to me and that I agree to be in the study. I know what will happen to me. If I decide to quit the study, all I have to do is tell the person in charge.

_____ _____

Child's Signature Date

_____ _____

Signature of Researcher Date

Appendix G

ASSENT FORM

PERSONALITY STUDY OF ADOLESCENT GIRLS

I agree to be in a study about personality development in adolescence. The study concerns the different stages that adolescents go through as they prepare to become adults. The main focus is on how individual differences in development affect the person's ability to cope effectively. This study was explained to my guardian and he/she said that I could be in it. The only people who will know about what I say and do in the study will be the people in charge of the study and potentially my parents and or legal guardian should they request this information. The only exception to this rule is that any discovery of abuse or intent to harm self or others will be reported.

In the study, I will be asked questions about myself and things related to my life. I will then be asked to fill out three questionnaires. Some of these questions are personal and sensitive in nature. I don't have to answer any question which makes me feel uncomfortable. The process will take about an hour and a half. The interviewer will be there with me the entire time so that I can ask any questions I might have. I can take a break at any time.

Writing my name on this page means that the page was read to me and that I agree to be in the study. I know what will happen to me. If I decide to quit the study, all I have to do is tell the person in charge.

_____ _____

Child's Signature Date

_____ _____

Signature of Researcher Date

Appendix H

Medications Prescribed to Clinical Groups

Anti-Depressants/Anti-Anxiety
Zoloft—Depression, Anxiety
Lexapro—Depression, Anxiety
Prozac—Depression, Anxiety
Celexa—Depression, Anxiety
Effexor—Depression, Anxiety

Mood Stabilizers
Risperdal—Mood, Aggression, Severe Agitation
Lithobid—Mood Management, Mood Stabilization
Trileptal—Mood Stabilization, Mood Management, Mood Modulation
Geodon—Mood Management, Anger
Depakote—Mood Stabilizer, Mood Management
Escalith—Mood Stabilizer
Lithium—Mood Stabilizer

Anxiety
Ativan—Extreme Anxiety, Aggression
Lamictal—Agitation, Depression
Hydroxizene—Anxiety, Side Effects of Effexor
Abilify--Anxiety

ADD/ADHD
Concerta--ADHD
Seroquel—ADD, Anxiety, Agitation, Insomnia
Adderal—ADD, ADHD
Stratera--ADD

Sleep
Trazadone—Sleep, Depression
Remeron--Sleep
Ambien--Sleep
Topamax--Sleep

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VITA

Anna Elisabeth Middleton was born on November 8, 1960 in Stockholm, Sweden, the daughter of Karin Anita Brigitta Premfors and Harlow Clester Middleton. She moved to the United States at the age of seven and took up residence in Florida. Following her graduation from Mount Dora High School in 1978, she attended Eckerd College in St. Petersburg to study Liberal Arts. After spending her junior year at the University of Stockholm, she returned to Eckerd College to complete her degree in Political Science, and received her Bachelor of Arts degree in 1982. She spent several years traveling, working, and pursuing a teaching certificate at the University of Texas at Austin. In 1993, she entered graduate school at the University of Texas to pursue a doctoral degree in Counseling Psychology in the Department of Educational Psychology. She also taught Swedish in the Department of Germanic Languages and served as a Teaching Assistant in several graduate courses in Counseling Psychology. She was also employed as a contract therapist and telephone counselor at the University of Texas Counseling and Mental Health Center, where she continues to work. She completed her Psychology Internship at Austin State Hospital and specialized in the Child and Adolescent Track. She has a younger sister in Florida and currently lives in Austin with her two young children.

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