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Disorders Of Extreme Stress, Not Otherwise Specified, Posttraumatic Stress Disorder, And Borderline Personality Disorder: A Vignette Study Exploring Clinicians' Diagnostic Perceptions

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Disorders of Extreme Stress, Not Otherwise Specified, Posttraumatic Stress Disorder, and Borderline Personality Disorder: A Vignette Study Exploring Clinicians' Diagnostic Perceptions

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ABSTRACT

Research suggests that some individuals who suffer invasive, early childhood trauma develop significant character pathology, and may meet the criteria for both Posttraumatic Stress Disorder (PTSD) and Borderline Personality Disorder (BPD). Trauma researchers have proposed a new diagnostic category for these individuals, called Disorders of Extreme Stress, Not Otherwise Specified (DESNOS), also known as Complex PTSD. The present study compared clinicians' symptom ratings for two case vignettes to determine if DESNOS was a better description of the cases than PTSD, BPD, or comorbid PTSD/BPD. Additionally, potential sex bias in diagnosis was examined by manipulating the sex of the client in the vignette, and examining effects of participant sex.

A national sample of 123 licensed psychologists completed the study online. The participants read both vignettes, rated the symptoms in each case, and assigned a diagnosis. The hypothesis that DESNOS would receive higher mean symptom ratings than PTSD, BPD, or comorbid PTSD/BPD was not supported. PTSD and BPD each received higher mean symptom ratings than DESNOS in Vignette A, but in Vignette B there were no significant differences in the symptom ratings. The hypothesis that sex of the client in the vignette would influence the diagnosis of BPD was not supported in Vignette A, but was supported in Vignette B, in which all BPD diagnoses were assigned to the female case. The hypothesis that female participants would

endorse higher PTSD diagnostic ratings than would male participants was not supported. However, female participants assigned higher PTSD symptom ratings, and endorsed more of the symptoms of PTSD for Vignette A than did male participants, suggesting that the women attended more to the trauma history in the case. Overall, the study provided limited support for the construct of DESNOS. Limitations of the methodology, implications of the findings, and directions for future research are discussed.

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CHAPTER 1

INTRODUCTION

Research over the past few decades has consistently indicated that childhood abuse is highly correlated with the diagnosis of Borderline Personality Disorder (BPD) (Herman, Perry, & van der Kolk, 1989; McLean, 2004; Yen & Shea, 2001). Various types of childhood trauma, such as physical abuse, sexual abuse, and serious neglect that interfere with attachment have all been implicated as potential contributing factors to the development of BPD. However, childhood sexual abuse (CSA), in particular, has been often cited as a precipitating factor (McLean, 2004).

Posttraumatic stress disorder (PTSD) first became part of the psychiatric lexicon with the publication in 1980 of the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III; American Psychiatric Association [APA], 1980) (van der Kolk, Roth, Pelcovitz, Sunday & Spinazzola, 2005). The diagnostic criteria for PTSD, as conceptualized by the DSM-III committee, focused on war veterans, recently returned from Vietnam, who suffered the effects of combat stress previously known as "shell shock." According to van der Kolk et al. (2005), prior to the formulation of PTSD as a diagnosis, the effects of women's trauma (most often associated with sexual assault and other types of interpersonal violence, as opposed to combat stress) had been conceptualized as entailing difficulties with safety, trust, self-worth, ongoing

revictimization, somatic symptoms, as well as disruptions and fracturing of the sense of self. These authors suggested that the psychological disturbances found in traumatized women, especially those who are exposed for prolonged periods to severe abuse, are not sufficiently described by the current PTSD criteria (see Appendix A). The more severe and complex interpersonal and intrapsychic disturbances seen in those who have endured longstanding abuse, especially beginning in early childhood, may be better accounted for by a new diagnostic category, called Disorders of Extreme Stress Not Otherwise Specified (DESNOS) (see Appendix B).

One position taken by trauma and personality researchers that has gained recent attention concerns the overlap between the criteria proposed for DESNOS, and the criteria currently used in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV-TR; APA, 2000) to diagnose BPD (see Appendix C). The psychological sequelae of DESNOS do not precisely mirror the criteria for BPD. However, the DESNOS symptomatology certainly has much in common with the characteristics routinely associated with BPD, including problems with affect regulation; self-destructive behaviors such as self-harm and suicidality; dissociative states; chronic shame; somatic symptoms; despair and hopelessness; and difficulties in interpersonal relationships, including mistrust and revictimization.

BPD as a diagnostic category has been steeped in controversy, as it has taken on a distinctly pejorative meaning among clinicians (Becker, 2000; Herman, 1992; Hodges, 2003). This association that the diagnosis has acquired with difficult counter-transferential feelings has come to be inextricably intertwined with the conceptualization of the borderline character, such that the triggering of such responses has become associated with the diagnosis itself.

The issue of potential gender bias and observed sex differences in BPD is not unique to this diagnosis; other personality disorders have also been found to be far more prevalent among women (e.g., Histrionic, Dependent) or among men (e.g., Antisocial, Obsessive-Compulsive, Narcissistic, Paranoid, Schizoid, Schizotypal) (Widiger, 1998). The charge of bias has at times been extended in many directions, to clinicians, researchers, or the psychiatric community largely responsible for diagnostic classification. Some studies have found that when women and men present with identical symptoms, women will be more likely to be diagnosed with BPD (e.g., Becker, 1994). Thus, the proposition of DESNOS as a viable alternative diagnosis for traumatized individuals (and women in particular) is a response to the perceived inadequacies of the BPD and PTSD diagnoses to succinctly capture the symptom presentations of such individuals, and is also a response to the sociohistorical context in which this debate takes place. Some of the literature suggests that this newly proposed category might better account for the psychological sequelae encountered among severely traumatized individuals than either BPD or PTSD.

The present research examined whether the proposed criteria for DESNOS better captures the symptomatology associated with early trauma than those of the existing diagnoses, BPD and PTSD. The study also examined gender bias in the diagnosis of BPD versus PTSD. In order to provide a context for the research, this paper will first explore the literature on the relationship between childhood trauma and BPD, the issues surrounding gender and the diagnosis of BPD and PTSD, comorbid PTSD and BPD, and the literature on DESNOS. Additionally, the literature on sex bias in the diagnosis of BPD will be presented, as will the topic of gender and bias as it relates to the expression and perceptions of traumatic symptoms among both men and women.

Trauma and Borderline Personality Disorder (BPD)

Numerous studies have explored the co-occurrence of trauma and BPD. One of the early and influential studies (Herman, Perry, & van der Kolk, 1989) found very high rates of childhood abuse among 55 patients who were found to have BPD. In this study, 29 women and 26 men were assessed by two of the authors. Twenty-one of the participants were diagnosed as having BPD (17 women and 4 men). Additionally 11 men were found to have borderline traits. These groups were compared with non-borderline participants. Herman et al. found that 81% of participants with BPD reported trauma histories, including 71% who reported physical abuse, 68% who reported sexual abuse, and 62% who reported witnessing violence.

Abuse histories were not as common in the participants with BPD traits (but not the BPD diagnosis), and even less common in those who were classified as non-borderline (Herman et al., 1989). Of those participants who reported abuse in the youngest age range (0-6 years of age), BPD participants made up the vast majority. The BPD group also reported more abuse in latency and into early adolescence, with the differences between groups decreasing into middle and late adolescence, when they became non-significant. The types of abuse suffered by the BPD group were more varied, progressed over longer time periods, and resulted in higher trauma scores as compared to the other groups.

The BPD group, despite the higher cumulative trauma scores, did not have higher rates of PTSD, a finding that Herman et al. (1989) explained as indicative of the ego-syntonic nature of the memories of the childhood abuse. That is, they speculated that the participants had integrated the memories of abuse, such that they were not perceived as intrusive as would be the case in PTSD. Herman et al. proposed that this finding was consistent with the trauma literature, which states that abuse memories can be transformed over time and experienced in disguised ways,

such as affective states, somatic symptoms, dissociated states or trauma reenactment, all of which are perceived by the individual as completely unrelated to the original trauma. Thus, these authors postulated that BPD might be conceptualized as an adaptation to childhood trauma, although they were cautious in noting that childhood trauma is likely one component of a complex etiology, and not a sole explanation for BPD.

Ogata et al. (1990) examined the patterns of childhood sexual and physical abuse in 24 adult inpatients with BPD. A control group of depressed inpatients with similar demographic characteristics was used for comparison. The researchers assessed for physical and sexual abuse (by parent, sibling, other family member or non-relative) and physical neglect. Abuse events were rated for frequency, duration, severity, age at the time of abuse, and perpetrator type. Ogata et al. found significantly higher rates of sexual abuse among the BPD patients (71%) compared with the depressed control group (22%). The BPD participants also reported greater incidence of abuse by non-parental relatives and non-relatives, as well as higher rates of multiple perpetrators throughout their childhood, which the authors interpreted as potentially indicative of chaotic homes in which there were poor boundaries and in which children were not well protected. These findings are consistent with a body of literature that suggests that BPD is associated with histories of childhood abuse (Barnard & Hirsh, 1985; Courtois, 1988; Paris, 2001; Rieker & Carmen, 1986; Stone, Unwin, Beacham & Swenson, 1988; Surrey, Swett, Michaels & Levin, 1990; Wheeler & Walton, 1987). An obvious limitation to the Herman et al. (1989) and Ogata et al. (1990) studies is that they rely on self-report data from the participants. Yet the studies used patients with other psychiatric diagnoses as comparison groups; one might argue that there is no reason to assume that patients with BPD would manufacture historical information at differing

rates from those with other personality disorders or Axis I diagnoses. Nonetheless, inferences made from studies using self-report data without corroboration remain problematic.

One common criticism of the data regarding the association between BPD and trauma concerns the fact that many other types of psychopathology may be associated with childhood abuse or neglect, including other Axis II disorders (Gunderson & Sabo, 1993). In a study supporting this assertion, Golier et al. (2003) assessed 180 men and women for personality disorders. The most common Axis II diagnoses found were BPD, Schizotypal, and Paranoid. The number of men and women with BPD did not differ significantly in this sample. The participants were assessed for a variety of different types of childhood and adult trauma, including physical and sexual abuse, witnessing violence, and other types of traumatic life circumstances. Golier et al. found that, although reported rates of trauma in both childhood and adulthood were greater for the sample as a whole than for other studies of psychiatric outpatients, the BPD group did not differ significantly from the other groups in reported childhood and adolescent sexual abuse. Also, the BPD group did not have higher rates than the other PD groups of adult trauma. Furthermore, Paranoid PD was found to be highly correlated with physical abuse, in both childhood and adulthood. Golier et al. concluded that the relationship between BPD and childhood abuse was not unique to BPD, but also applied to other personality disorders.

In contrast, Battle et al. (2004) reported findings from the Collaborative Longitudinal Personality Disorders Study that compared the childhood trauma histories of 600 participants with BPD, Schizotypal, Avoidant, or Obsessive-Compulsive personality disorders, and found a significantly stronger association between BPD and childhood abuse and neglect than for the other personality disorders. The participants with BPD reported more extensive and varied childhood abuse than did participants with other personality disorders. The reported abuse by

those with BPD included sexual abuse by caretakers and non-caretakers, as well as emotional and verbal abuse. Neglect was also prominent among the BPD participants and consisted of both physical neglect and emotional withdrawal on the part of caregivers and lack of protection by a primary caregiver.

Some researchers have proposed that it is the specific types of abuse and neglect perpetrated by multiple caretakers that predict BPD, more so than sexual abuse per se (Zanarini et al., 1997). Zanarini et al. assessed 467 inpatients with personality disorders, 358 of whom had BPD. The findings in this study were consistent with past literature, in that the participants with BPD had much higher overall rates of childhood abuse and neglect than did the non-BPD participants. However, the detailed information the investigators gathered regarding these experiences shed new light on the types of abuse that were found to be strongly associated with BPD. Emotional withdrawal of the caretaker, being placed in a parentified role, not being protected by a caretaker, and having feelings or thoughts invalidated by a caretaker were each found to be more common in the BPD group.

Another important finding in this study was that the variety and extent of types of abuse were most dramatic in those participants with BPD who had been sexually abused, when compared with those participants with BPD who had not been sexually abused (Zanarini et al., 1997). The authors interpreted this to mean that sexually abused participants with BPD came from generally more chaotic homes. The sexually abused participants were more likely to have also experienced physical and emotional neglect by both parents, and various types of physical, emotional, and sexual abuse by multiple caretakers. In particular, sexual abuse by non-caretakers was much higher in this group. The authors suggested that sexual abuse among persons with BPD, rather than being a single factor in the etiology of the disorder, may "…represent a marker

of the severity of the familial dysfunction they experienced…" (p. 1104). They postulated that neglect by both parents might place the child at risk for being abused by non-caretakers.

A growing body of literature continues to find disproportionately high reported histories of childhood sexual and physical abuse and neglect among individuals with BPD (e.g., Gunderson & Sabo, 1993; Herman, 1992; McLean, 2004; Yen & Shea, 2001; Zanarini et al., 1997), notwithstanding conflicting opinions concerning the meaning of such findings. Despite the strong relationship observed between childhood abuse and neglect and BPD, however, the role of abuse in the etiology of BPD is complex. Most individuals who experience childhood abuse do not develop BPD (Paris, 2001). Moreover, approximately 20% of individuals with BPD report no trauma history (Gunderson & Sabo, 1993).

Some researchers and clinicians have sought to change the conceptualization of traumatized individuals with significant psychopathology (Herman, 1992; McLean, 2004). Rather than viewing such individuals as having character pathology, such as BPD, it has been proposed instead that they be viewed as having a trauma-reactive syndrome. The impetus behind this concerns the stigma with which BPD has come to be associated, and the perception that the BPD diagnosis handicaps the individual with what has become, for some, a derogatory label.

Stigma Associated With BPD

BPD as a diagnostic category has been steeped in controversy, as it has taken on a distinctly pejorative meaning among clinicians (Becker, 2000; Herman, 1992; Hodges, 2003). Becker proposed that the label "hysterical" which predominated at the turn of 20th century has much in common with our present category of BPD. Hysteria was associated with difficult, angry and demanding female patients, who had vague, persistent symptoms, and with whom physicians invariably became impatient and frustrated.

This association that the BPD diagnosis has acquired with difficult counter-transferential feelings has been criticized as evidence of circular reasoning (Beck & Freeman, 1990; Becker, 2000). That is, one might diagnose the client as borderline because he or she elicits such negative affect on the part of the therapist, while simultaneously viewing the presence of such countertransferance as stemming from the client's borderline condition. Although such countertransferential responses are, obviously, absent in the actual diagnostic criteria for BPD, the experience of working with clients with chronic anger, intense neediness and emptiness (which the clinician is powerless to fill), and resistance to treatment, has come to be inextricably intertwined with the conceptualization of the borderline character (Lenzenweger & Cicchetti, 2005). The triggering of such responses has become associated with the diagnosis itself.

Likewise, the negative affect such clients might elicit has caused an initial response to the client diagnosed with BPD, an inward groan as it were, on the part of the clinician who sees the term "borderline" in the client's chart, irrespective of the client's actual behavior. Just the mention of the term is enough to cause anticipation of failure in treatment (Lenzenweger & Cicchetti, 2005; Stefan, 1998). The implications of this phenomenon reach beyond the interview room, into patients' lives; documented instances of child custody cases have shown that the parent who has been labeled with BPD might pay for this label with the loss of custody, since he or she might be characterized as permanently untreatable by the court (Stefan, 1998). This has earned BPD the title of, in the words of Becker (2000), the "bad girl" of psychiatric diagnoses (p. 422).

Gender and Bias in the Diagnosis of BPD

The charge of sex bias is not unique to BPD. Histrionic and Dependent personality disorders have also been found to be diagnosed more frequently among women (Widiger, 1998).

Likewise, certain personality disorders have been found to be diagnosed more commonly in men (e.g., Antisocial, Obsessive-Compulsive, Narcissistic, Paranoid, Schizoid, Schizotypal). A large body of research has emerged that addresses the potential sources of such differences, sources that are complex and varied, and cannot be reduced to a cause as simplistic as bias alone. Widiger noted that gender differences in the rates of disorders do not necessarily indicate bias. In addition, he identified a number of possible sources from which bias might emerge, including biased diagnostic constructs, biased diagnostic thresholds, biased application of the diagnostic criteria, biased sampling, biased instruments of assessment, and biased diagnostic criteria. Various criticisms concerning bias in the classification and diagnosis of personality disorders over the past two decades or so have placed the nexus of the problem in one or another of these areas.

The issue of sex bias in the DSM criteria for personality disorders was first raised by Kaplan (1983), who, in an influential (and humorous) indictment of the DSM-III, suggested that all a woman need do was behave in the stereotypical, proscribed manner to which she was socialized, and she could earn a diagnosis of Histrionic Personality Disorder. This charge assails the histrionic personality disorder construct itself, implicating it as an inherently biased characterization of exaggerated femininity. Widiger (1998) acknowledged that there were clearly traits in the PD criteria that were related to gender. However, as Williams and Spitzer (1983) countered, this was not unique to the disorders more commonly found in women. Thus, asserting the claim that misogyny was at the root of the matter seemed somewhat unjustified. In fact, Williams and Spitzer pointed out that several disorders clearly had traits that were strongly associated with masculine stereotypes, such as those associated with Obsessive-Compulsive PD

or Antisocial PD, and yet these traits still garnered a label of maladaptive by the (predominantly male) psychiatric establishment.

Another approach to the issue is to conceptualize the personality disorders as extreme examples of normal traits (Corbitt & Widiger, 1995). In such a dimensional model, one can imagine a range of traits (whether they are perceived as masculine or feminine) along a continuum; in the case of the personality disorders, such traits would have become inflexible and maladaptive deviations from the normal range. In a meta-analysis based on the Five-Factor Model, Feingold (1994) found that certain traits have been observed to be more prevalent in women than in men. Corbitt and Widiger maintained that the differences found in the prevalence rates of the personality disorders are consistent with Feingold's findings, in that they appear to be maladaptive, exaggerated presentations of such traits.

The question arises, then, of how such traits are perceived, either by clinicians, by clients, or by the culture at large, to be "feminine" or to be "masculine", and moreover, what this means when it comes to the diagnostic criteria for BPD. Sprock, Blashfield and Smith (1990) studied the gender weighting of the criteria for the personality disorders, including BPD. In this study, 50 undergraduates (33 women and 17 men) who were naïve to the DSM-III-R (APA, 1987) were presented with the 142 criteria for 13 personality disorders (which also included Self-Defeating and Sadistic). They were asked to sort the criteria along a gender dimension. Each criterion was placed somewhere on the continuum from those features that would be most typical of men, to those that would be most typical of women. Interesting results emerged regarding the BPD criteria; no bias toward assigning the criteria more to women than men was found, which was unexpected given the higher prevalence of BPD among women. Sprock et al. noted that one BPD criterion, intense and inappropriate anger, was perceived by the participants as very much a

masculine feature, and in fact, formed part of the male personality disorder prototype, which was Sadistic. Dependent personality characteristics emerged as the female prototype. Sprock et al. proposed that perhaps men and women with BPD manifest different patterns of behavior, with greater dependent features (such as efforts to avoid abandonment) being characteristic of women with BPD, and more anger and aggressiveness on the part of men with BPD.

Sprock (1996) hypothesized that perhaps one of the reasons certain characteristics are pathologized (such as intense anger in women, who might then be given a diagnosis of BPD if this feature is a prominent part of their character) may be related not to sex bias, but rather to inconsistency with sex roles. That is, perhaps when women or men behave in ways that are perceived as not in keeping with socially proscribed gender stereotypes, these behaviors are perceived as more maladaptive. To explore this hypothesis, Sprock asked 60 undergraduates to rate the "abnormality" of the DSM-III-R personality disorder criteria. The participants were divided into three groups, those who rated the symptoms for men, those who did so for women, and those who were given no gender instruction (a neutral condition). The results for BPD criteria indicated that intense and inappropriate anger was viewed as more abnormal for women, and thus inconsistent with the female gender role. Additionally, suicidal threats and gestures were viewed as more abnormal for women. Sprock hypothesized that when conceptualizing a case (or case vignette in research), clinicians apply expectations about gender roles in determining how adaptive or maladaptive behavior is, such that the same behavior or trait in a man will be viewed differently if it occurs in a woman. Sprock concluded that it was important to understand the diagnostic process within this context. The author noted that one limitation to this study was the potential ambiguity of the word "abnormal" in the instructions given to participants; the individual participants might have interpreted this term differently.

In a follow up study, Sprock, Crosby, and Nielsen (2001) examined the influence of sex on the perceived maladaptiveness of DSM-IV (APA, 1994) personality disorder criteria. The authors defined maladaptiveness as causing stress or impaired functioning. Although the results for BPD did not reach significance, the results for other personality disorders differed from the results of the Sprock (1996) study. Most notably, the criteria for Dependent personality disorder were rated more maladaptive for females, and the criteria for Obsessive-Compulsive personality disorder were rated more maladaptive for males. Given that Dependent personality features have been associated with a feminine sex role, and Obsessive-Compulsive personality features have been associated with a masculine sex role (Kaplan, 1983), these results suggested that the criteria were rated more maladaptive when conforming to, rather than differing from, anticipated sex roles. Sprock et al. explained these results by suggesting that displaying traits that are inconsistent with sex roles may have been interpreted as "abnormal" (i.e., rare or deviating from the norm) in the previous (Sprock, 1996) study. Yet, when given a definition of "maladaptive" that suggested impairment and distress, participants in the Sprock et al. (2001) study viewed sex role-stereotyped behaviors (at least as related to Dependent and Obsessive-Compulsive traits) as more maladaptive, i.e., suggestive of psychopathology. Sprock et al. noted, however, that similar results did not emerge for either Histrionic or Antisocial personality disorders, an unusual finding given that these two disorders are most frequently associated with sex bias (Garb, 1997; Widiger, 1998).

Anderson, Sankis and Widiger (2001) examined a number of personality disorders that have different prevalence rates for men and women, one of which was BPD. Using a total of 274 clinicians as participants, they sought to determine if the perceived maladaptivity of the personality disorder criteria differed by gender of the case. The authors postulated that perhaps

the raters in the Sprock (1996) study were responding to statistical infrequency when deciding upon the abnormality of the criteria, rather than the maladaptivity of the criteria. Thus, they set up two conditions so that the raters determined both infrequency as well as maladaptivity, which was defined as significant clinical impairment. Anderson et al. found no significant gender effect in any of the criteria regarding the maladaptiveness; that is, the criteria were rated as equally maladaptive whether rated for women or for men. However, the differences in frequency were consistent with known prevalence rates, so that for BPD, the criteria were rated as more frequently occurring in women, but equally pathological in either a man or a woman.

This raises the question as to whether the different prevalence rates between genders in the diagnosis of BPD may be influenced by base rates of the disorder. The raters in the Anderson et al. (2001) study were clinicians who would have been familiar with the base rates of the personality disorders. Some have suggested that the more nebulous and difficult a case is to diagnose, the more base rates of the disorder might come into play as a diagnostic tool (Flanagan & Blashfield, 2003). If a client is assessed, and the diagnostic picture is hazy, the clinician might rely more on knowledge of base rates that pertain to sex of the client. Some traits might be interpreted as Antisocial when the client is male, but as BPD when the client is female (e.g., sexual promiscuity or substance use). Flanagan and Blashfield also noted that this phenomenon has been observed in vignette studies; the more vague the symptom presentation, the stronger the gender effect will tend to be. For example, Crosby and Sprock (2004) found that when presented with an Antisocial case, clinicians were more likely to diagnose the case as BPD when the client was female, suggesting a reliance on base rates. The fact that there is significant overlap of symptoms in the criteria of a number of the personality disorders complicates this further.

Flanagan and Blashfield (2003) wondered what they would find if the base rate information conflicted with social stereotypes about gender specific behaviors. They conducted three studies, one in which the criteria were gender neutral, one in which the criteria were consistent with gender stereotypes, and one in which the criteria were inconsistent with gender stereotypes. The studies consisted of training undergraduates who were psychology majors to learn the criteria associated with personality disorders. In the learning phase, the criteria for the personality disorders were learned as either neutral, or assigned a gender that was consistent or inconsistent with stereotypes. In the second phase, the participants in the gender-consistent and gender-inconsistent conditions were asked to recall the gender they had previously learned to be associated with that disorder. The results indicated that it was more difficult for the participants in the inconsistent condition to learn the criteria for all of the disorders. However, the percentage of participants who learned the associations inconsistent with gender stereotypes was lowest for BPD and Antisocial. The authors concluded that these results demonstrate that base rate information is most salient when it is consistent with gender stereotypes. Thus, when base rate information conflicts with social stereotypes, it may exert less of an influence on diagnosis.

Flanagan and Blashfield (2005) noted that one of the difficulties of case study or vignette methodologies is that an entire case is presented at once. Therefore, it is difficult to ascertain what aspect of the case in particular was influential in the clinician's diagnosis. Thus, in the case of studies examining gender bias, it is hard to know what factors are causing the effect. The authors designed a novel methodology in which a computer program would be prompted to reveal just one or two sentences of the vignette at a time. The criteria used were traits that were either Histrionic or Antisocial. The participants, 99 psychologists and psychiatrists, then had to either make a diagnosis or state no diagnosis after each line of the vignette. The results regarding

BPD were quite interesting; when the vignette described both Antisocial and Histrionic traits in an even combination (either two or four traits from each disorder), the clinicians made the diagnosis of BPD. No gender effect was found, however. This study allowed for a greater level of specificity in determining which combination of criteria were influencing this diagnosis. The authors concluded that the findings were consistent with previous literature that indicated that a mixed Antisocial/Histrionic picture is often interpreted as BPD (Ford & Widiger, 1989, as cited by Flanagan & Blashfield, 2005).

Gender and Posttraumatic Stress Disorder

The inclusion of PTSD as a diagnosis in the DSM-III in 1980 developed within the humanistic and existentialist context of the times, in that the diagnosis served to validate the experiences of traumatized Vietnam veterans as a normative response to the horrors of the war (Yehuda & McFarlane, 1995). Contained in this conceptualization is the anti-war sentiment that was so prevalent during this era, and a recognition of the difficulties these veterans faced, men who were not welcomed home as heroes as in previous overseas conflicts. Thus, from its conception, there was a socio-political element to this diagnosis that distinguished it from other mental health diagnoses in the psychiatric nosology. PTSD remains one of only three diagnoses in the DSM that mention in their criteria sets an external event as a precursor to maladaptive psychological symptoms (the others being Acute Stress Disorder and Adjustment Disorder).

Although the diagnosis was created as a reaction to the influx of (almost exclusively male) traumatized Vietnam veterans, therapists working with women who were traumatized recognized similar symptoms in their clients (Becker, 2000). Socio-political factors again applied, as the women's movement was in full swing, and therapists (particularly feminist therapists) saw great benefit in validating women's trauma and not pathologizing survivors of

sexual abuse or domestic violence. Just as BPD had become the "bad girl" of psychiatric labels, PTSD became the "good girl" (Becker, 2000, p. 422), in that by applying this diagnosis, therapists hoped to reframe the problems of traumatized women and minimize the stigma associated with BPD. However, the PTSD diagnosis was often not a good fit for these women, as the criteria were developed based on men's combat trauma; the trauma experienced by men and women tends to differ in type, and the expression of symptoms also varies between the genders (van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Furthermore, Becker (2000) focused on the overarching sociological aspects of the debate, and proposed that framing women's responses to sexual and physical violence as a disorder (even if it is a less stigmatizing one) still serves to label it as a medical condition; Becker further asserted that this does not serve women in a broader sense, since it does not address the social structure that enables such violence against women in the first place.

Another controversy surrounding the PTSD diagnosis is its original conceptualization as a normative response to trauma; subsequent research contradicts this notion, as numerous studies have demonstrated that PTSD develops in a small subset of people exposed to significant trauma, and in fact, the majority of trauma survivors do not develop serious psychological symptoms (Yehuda & McFarlane, 1995). This body of research suggests that there are pre-existing vulnerabilities in the individual that account for the development of PTSD following exposure to trauma. A salient question that has arisen, then, is if PTSD is not a normative response, what are the factors that predispose an individual for maladaptive responses to trauma?

In a review of the PTSD literature, Gavranidou and Rosner (2003) determined that both event characteristics and personal characteristics influenced the development of symptoms. The factors with the strongest association to PTSD were previous traumatization, severity and

duration of trauma, type of trauma, prior psychopathology, and female gender. Prevalence rates generally indicate that women have higher rates of PTSD than men, although there are conflicting data on this point depending on the particular study, and on the classification system used, with variation between rates using the DSM-IV versus the International Classification of Diseases, 10th Edition (ICD-10, World Health Organization, 1990) (Peters, Issakidis, Slade & Andrews, 2006). The National Comorbidity Survey (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995) found the prevalence rate of PTSD in the United States to be 10.4% in women, versus 5.0% in men.

It is interesting to note that, overall, men are exposed to more lifetime traumatic events than are women, yet their rates of developing PTSD remain lower (Peters et al., 2006). It has been suggested that this is due to the type of trauma experienced by each gender; men are more likely to experience assault, combat or other less personal types of trauma such as crime (and with greater frequency overall), whereas women are more likely to experience trauma that is interpersonally intrusive in nature, such as sexual abuse by known perpetrators, domestic abuse, or rape (Gavranidou & Rosner, 2003). Rates of childhood sexual abuse (CSA) vary widely depending on the particular study one reviews; the National Comorbidity Survey found the rate of CSA for women was 13.5%, versus a rate of 2.5% for men (Molnar, Buka, & Kessler, 2001). However, Walker, Carey, Mohr, Stein, and Seedat (2004) found rates of CSA in the literature as high as 62% for girls and 31% for boys. Despite there being much variability in the findings, all of the studies are consistent in reporting that rates for women are far higher than those for men.

Sexual trauma has emerged as the trauma type most consistently associated with PTSD (Norris, Foster, & Weisshaar, 2002). This would seem to explain the higher rates of PTSD seen in women. However, Peters et al. (2006) found that women were still more likely to develop

PTSD even when controlling for the type of trauma. These authors suggested that other factors, aside from varying experiences, must also play a role. Furthermore, some studies have examined both sexually abused boys and girls, and still found differing rates of PTSD. For example, Ackerman, Newton, McPherson, Jones and Dykman (1998), in a study of children aged 7-13 years, found PTSD symptoms in 35% of the girls versus 20% of the boys. Walker et al. cited similar results in several other studies they reviewed, suggesting that even when both genders have experienced sexual abuse, female gender remains a greater predictor for developing PTSD. These authors proposed that for women, the higher incidence of sexual abuse and the greater risk of developing PTSD as a result of such abuse have a cumulative effect, with each factor independently contributing to the greater risk of PTSD in women.

Several questions arise from this research. Do women experience trauma differently than men? Do women and men experience trauma in the same way but express it differently? Is there some bias in assessment that accounts for the varying rates of PTSD between the genders? One hypothesis is that sex roles play a part in the endorsement of symptoms, so that women and girls are more likely to report certain symptoms than are men or boys (Gavranidou & Rosner, 2003; Peters et al., 2006). Given that males are socialized to both view themselves and portray themselves to others as strong, capable, and independent, whereas females are socialized to be more passive, dependent, and accepting of help from others, the differing rates may simply be a difference in the admission of symptoms, rather than a difference in the actual presence of such symptoms (Gavranidou & Rosner, 2003). Add to this the fact that PTSD researchers depend primarily on self reports from participants (Cusack, Falsetti, & Arellano, 2002), whether in a clinical interview or survey, and the potential for differences in endorsement of symptoms between men and women is evident.

Another possibility is that the differences in the way women and men are socialized lead to different responses to trauma, such that women are affected more adversely than are men by similar experiences (Gavranidou & Rosner, 2003). Some researchers have focused on the influence of different cognitive styles of processing trauma between the genders. Foa, Ehlers, Clark, Tolin and Orsillo (1999) found, in a study of 120 men and 183 women who had reported a traumatic event, that women endorsed significantly more self-blame items than did men. The authors cautioned, however, that trauma type was not controlled for, so the findings may reflect gender differences, or alternately, differences associated with type of trauma. Nonetheless, this finding is consistent with the literature on coping styles and gender (Thoits, 1991); women tend to use more emotion-focused coping (including seeking social support, engaging in wishful thinking, or self-blame), especially in situations in which they perceive themselves as having less control, whereas men tend to use different forms of coping (such as using distraction, ignoring, or acting out). Women's ruminative, introspective style, Thoits proposed, might account for greater perceived distress following trauma.

Gavranidou and Rosner (2003) suggested a (seemingly) related sex bias phenomenon is also at work, which they proposed is a methodological artifact. In their discussion of Grayson et al. (1996), Gavranidou and Rosner noted that women clinicians have been found to expect other women to suffer more as a result of trauma, and therefore have been shown to have a lower severity threshold for PTSD diagnosis when interviewing women than when interviewing men. Therefore these authors suggest that the sex of the diagnostician may influence findings as well.

Mendelsohn and Sewell (2004) explored social attitudes toward men and women who had been traumatized in a vignette study with 93 male and 179 female participants. The participants were also administered the Bem Sex Role Inventory (Bem, 1981) in addition to the

case vignette. Mendelsohn and Sewell found that male victims who were experiencing psychological symptoms in reaction to trauma were viewed less favorably than were female victims. The type of trauma also influenced this response; participants viewed men who were victims of violent crime less favorably than those who were victims of a natural disaster. Men, and individuals who were rated as masculine sex-typed, viewed victims less favorably than women who were feminine sex-typed (there was not a sufficient number of feminine sex-typed men for analysis). The authors hypothesized that victimization and helplessness may be associated with femininity, therefore, men who fall victim are devalued. They further proposed that this finding helps to explain the lower rate of PTSD in men; men are aware that their trauma will be minimized and their symptoms will be viewed as less socially acceptable, therefore they are more likely to under-report symptoms.

The research reviewed here suggests a strong association between gender and PTSD diagnosis, but no single theory about the nature of this relationship exists. It seems that a variety of factors, including rates and types of trauma, cognitive responses to trauma, and either social support or social proscriptions related to the expression of symptoms are all interconnected in the gender differences seen in PTSD.

Gender and Bias in the Diagnosis of BPD and PTSD

Although a number of studies have examined sex bias in the diagnosis of BPD, few studies have looked simultaneously at sex bias in both BPD and PTSD. One study that did so was conducted by Becker and Lamb (1994) who examined sex bias in the diagnosis of both disorders. The authors hypothesized that the symptoms of traumatized women might be more apt to be interpreted by clinicians as BPD rather than as PTSD. In this study, case vignettes were presented to a total of 311 participants, including 39% social workers, 36% psychologists, and

24% psychiatrists. The vignettes described six possible cases, three describing men and three describing women. Each vignette described an individual whose symptoms met an equal number of DSM-III-R (APA, 1987) criteria for BPD and PTSD, although the symptom descriptions were not extensive enough to meet all the criteria fully, thus some ambiguity remained. The cardinal features of each disorder were omitted to maintain this ambiguity (for example, excessively overvaluing or devaluing others for BPD). Each participant read one vignette. They rated each diagnosis on a 7-point scale, from not present, to meets all criteria for the disorder. A variety of Axis I and Axis II disorders were presented for rating, including the target diagnoses of BPD and PTSD.

Becker and Lamb (1994) found that BPD was rated highest, overall, as a diagnosis for the cases, followed by Dysthymia and Self-Defeating personality disorder. PTSD was rated fourth highest overall. Clinicians tended to either endorse PTSD more highly, or much lower, with few in the middle range. Those clinicians who rated PTSD low also tended to rate BPD at a much higher range. The reverse trend was not found; the minority of clinicians who rated BPD at the low range did not diagnose PTSD in the high range. Interesting findings emerged with regard to sex of the client in the vignette; women received significantly higher ratings for BPD than did the men. Further, sex of the clinician influenced diagnosis, with female clinicians rating PTSD higher (in both the female and male versions of the vignette) than male clinicians. The authors controlled for the type of practitioner, as the social workers were predominantly female and psychiatrists predominantly male, and this finding remained significant. When examining the effect for clinician differences, it was found that younger clinicians tended to rate BPD higher than older clinicians. Also, psychiatrists, as a group, were less likely to rate PTSD highly. Lastly,

therapists who spent more of their professional time engaged in direct provision of client services tended to rate BPD higher as well.

Becker and Lamb (1994) concluded that sex bias was influential in the diagnoses made in this study. They postulated that, even if base rates were playing a role in the clinicians' decision making, the fact remains that men were underdiagnosed with BPD and male clinicians tended to underdiagnose PTSD in both genders. Moreover, they noted that base rates result from clinicians' diagnoses, thus continued reliance on previous base rates serves only to perpetuate further biasing of these rates.

Comorbidity of BPD and PTSD

McGlashan et al. (2000) conducted a major longitudinal study to explore the comorbidity of personality disorders and Axis I disorders, as well as the comorbidity among the personality disorders. This study assessed a large clinical sample (668 participants). Five study groups emerged, including Schizotypal, Borderline, Avoidant, and Obsessive Compulsive personality disorders, and Major Depressive Disorder (MDD) without personality disorder. Comorbidity between other Axis II and Axis I disorders was assessed among the study groups. The findings of this study showed a greater overall occurrence for Axis I disorders among the Borderline and Schizotypal groups than for the other personality-disordered groups. The BPD group (comprised of 175 participants) had high comorbidity with PTSD (46.9% of BPD participants also met criteria for PTSD). The other significant co-occurring Axis I disorders seen in the BPD group included alcohol and substance use disorders (52% and 53.1%, respectively). Although MDD was seen in 70.9% of the BPD participants, the authors noted that MDD is so ubiquitous among such an array of disorders that this finding is rendered meaningless. For example, the percentage of MDD exceeded 66% in all of the PD study groups. Thus, McGlashan et al. stated that

previous arguments in the literature in favor of the conceptualization of BPD as a mood disorder are unfounded due to this ubiquity of MDD. The most frequent Axis II diagnoses co-occurring with BPD in this study were Antisocial and Dependent Personality Disorders. Regarding PTSD, the authors noted that the high rate of comorbidity of BPD and PTSD found in this study is consistent with the comorbidity literature.

Shea et al. (2004) conducted a follow-up study with participants from the same Collaborative Longitudinal Study of Personality Disorders discussed above, using data collected from 544 of the participants. The aim of this study was to ascertain if any of the associations found between the five study group PD's and comorbid Axis I diagnoses varied over time. Specifically, the authors wanted to see if the status of Axis I diagnosis (still present or in remission) could predict the status of the Axis II diagnosis. The participants were assessed at 6 month, 12 month, and 24 month follow-ups. Shea et al. found significant predictors for BPD status among three Axis I diagnoses, MDD, PTSD, and Panic Disorder. Concerning PTSD, they found that BPD participants with PTSD that remitted over the entire follow-up period were more likely to also have their BPD remit, in comparison to those BPD participants whose PTSD did not remit. Likewise, improvements in BPD also led to improvements in PTSD, and these were seen in the time-varying analyses, not only over the entire period. This study showed no link between the substance use disorders and BPD status. The authors did not commit to a definitive explanation for their findings regarding BPD and PTSD. They noted instead that this might indicate shared dimensions among the symptoms of the disorders, or alternately, that the improvements in one disorder are somehow influencing improvements in the other, even if they are not shared dimensions.

In an effort to better understand the relationship between these two disorders, some studies have assessed the functioning of individuals with comorbid BPD/PTSD as compared with individuals with either disorder alone. Zlotnick, Franklin, and Zimmerman (2002) examined levels of pathology and impairment in patients with comorbid BPD and PTSD. The 469 participants (67% of whom were women) fell into four diagnostic groups: comorbid PTSD and BPD; BPD without current PTSD; current PTSD without BPD; and current MDD without PTSD or BPD. Zlotnick et al. found that participants with both PTSD and BPD diagnoses did not have more severe PTSD or BPD symptoms than did participants with either PTSD or BPD alone. Specifically, the dually diagnosed participants did not have more symptoms from more of the cluster areas of PTSD, more borderline traits, or more overall impairment in functioning than did the singly diagnosed participants. However, dually diagnosed participants did have more PTSD symptoms from cluster C, which targets avoidant features, than did participants diagnosed with PTSD only. Participants with PTSD only did not have higher levels of BPD traits, or traits associated with both BPD and PTSD, than did the participants who did not have PTSD.

Zlotnick et al. (2002) proposed that the lack of differences in impairment found in their study between the dually and singly diagnosed participants suggested that, because each of these diagnoses is chronic and severe, the additional diagnosis did not exacerbate the pathology seen to any appreciable degree. The authors suggested that the avoidant features more frequently found in the dually diagnosed participants indicated that participants with BPD and PTSD might respond to stressors more frequently with the dissociation and affect dysregulation typical in BPD than did the PTSD only group. The lack of other differences between the dually and singly diagnosed groups, Zlotnick et al. concluded, suggests that the pathology of each disorder may not be affected by the other disorder, that is, that these disorders are not describing the same

clinical syndromes. Further, they noted that the PTSD only group had no more BPD characteristics than did the MDD group without BPD features; thus, they proposed that PTSD is a separate construct.

In a similar study, Zlotnick et al. (2003) compared 186 women, divided into 3 groups of those diagnosed with BPD, those with PTSD, and a dually diagnosed (BPD and PTSD) group. Again, the researchers assessed for a variety of categories of impairment. They found that the women diagnosed with comorbid BPD/PTSD or diagnosed with BPD alone scored significantly higher in the domains of behavioral dysregulation, disturbed relatedness with others, affect regulation, impulsivity and suicide proneness than did the PTSD only group. The women diagnosed with BPD, with or without PTSD, tended to have lower overall functioning, as well as a higher number of hospitalizations. Thus, the authors proposed that the additional diagnosis of PTSD did not change the cardinal features of BPD present in these participants. The BPD/PTSD group also met criteria for significantly more Axis I disorders than the PTSD only group, thus the addition of a BPD diagnosis to the diagnosis of PTSD was associated with greater impairment. These findings are in contrast to the previous study (Zlotnick et al., 2002), a discrepancy the authors suggested was due to methodological differences, as the later study selected for individuals with personality disorders, whereas the previous study used a general sample of outpatients.

Gunderson and Sabo (1993) conducted a literature review to examine the relationship between BPD and PTSD. They acknowledged the significant overlap in symptoms in BPD and PTSD, particularly in affect regulation, impulse control, reality testing, self-integration and interpersonal relations. Gunderson and Sabo conceded that some symptoms of PTSD may be very enduring and pervasive, and thus might erroneously be diagnosed as BPD, but also

suggested that the opposite might also occur, that is, if symptoms are not recognized as comprising enduring patterns, and instead are viewed as reactions to a present situation, then PTSD might be misdiagnosed when there is a true BPD presentation. In cases in which an adult undergoes a significant trauma, then undergoes a change in personality, then BPD might be a misdiagnosis. In such cases, the ICD-10 allows for an appropriate diagnosis, "enduring personality change after catastrophic experience." The authors suggested this might be utilized to avoid misdiagnosis with BPD, but also to avoid having PTSD alone as a diagnosis, which fails to capture the personality changes.

Gunderson and Sabo (1993) also proposed that BPD might be an underlying vulnerability for PTSD, so that even mild trauma (such as relatively benign interpersonal conflict) can be enough to cause a significant trauma reaction in these individuals. Individuals with BPD, then, may be at greater risk for developing PTSD later in life, even if not in reaction to a devastating event. Thus, these authors suggested that stress in individuals with BPD triggers poor coping responses, which predispose the individual to more stress, which leads to more maladaptive responses, and so on. A complex mixture of symptoms might emerge over time that meets criteria for both PTSD and BPD.

Complex PTSD and DESNOS

According to van der Kolk et al. (2005), prior to the formulation of PTSD as a diagnosis, the effects of women's trauma (most often associated with sexual assault and other types of interpersonal violence) had been conceptualized as entailing difficulties with safety, trust, self-worth, ongoing revictimization, somatic symptoms, as well as disruptions and fracturing of the sense of self. These authors suggested that the psychological disturbances found in traumatized women, especially those who are exposed for prolonged periods to severe abuse, are not

sufficiently described by the current PTSD criteria. The more severe and complex interpersonal and intrapsychic disturbances seen in those who have endured longstanding abuse, especially beginning in early childhood, is better accounted for by a new diagnostic category, van der Kolk et al. have proposed, originally called Complex PTSD, and later, Disorders of Extreme Stress Not Otherwise Specified (DESNOS).

A group of trauma researchers, headed by van der Kolk and Herman, began in the late 1980s and early 1990s to explore the concept of Complex PTSD. They began by studying symptoms associated with their theory, such as dissociation, somatization, affect dysregulation, and self-destructive behavior. Early studies attempted to connect these symptom presentations with severe trauma histories. A series of such studies made up the collaborative DSM-IV Field Trial for PTSD, which sought to increase the research knowledge on Complex PTSD symptoms. The sequelae of Complex PTSD did not make it into the DSM-IV criteria for PTSD, but were instead listed as "associated features." Later, van der Kolk et al. (2005) proposed the category termed DESNOS, based on the accumulated data from the field trial studies.

In an early study, van der Kolk, Perry and Herman (1991) explored the trauma histories of participants who engaged in self-destructive behaviors. These behaviors varied in their severity, and included cutting, head banging, picking, burning, binge eating, anorexia, and suicide attempts. The participants were outpatient volunteers and non-clinical volunteers recruited from the community. Of the 74 subjects, 24 met criteria for BPD, and 17 had borderline traits. Other diagnoses included Schizotypal, Narcissistic and Antisocial personality disorders, and Bipolar II Disorder.

Results showed a significant association between BPD and self-injurious behaviors and suicide attempts. None of the other disorders showed significant associations with self-

destructive behavior. Furthermore, van der Kolk et al. (1991) found that among those participants who had engaged in self-harm, 79% reported histories of significant childhood trauma, and 89% had experienced major disruptions in parental care (such as separations). Among those who had made suicide attempts, 77% reported significant trauma and 72% disruptions in care. Childhood trauma scores predicted suicide attempts, cutting and other self-injurious behavior. Sexual abuse in particular was most strongly related to self-destructive behaviors. Moreover, the age at which sexual abuse occurred was influential, with earlier abuse being associated with more cutting behaviors. Abuse in adolescence, by contrast, was not associated with self-injury but with suicide attempts and anorexia. The participants were also seen for follow-up, 5-8 years after the initial study. An interesting new discovery emerged from the follow-up; neglect surpassed abuse as the most powerful predictor of self-destructive behavior. The authors proposed that, although trauma may contribute to self-destructive behavior, perhaps insecure attachments maintain these behaviors. The participants who endured the most egregious neglect and separation from caregivers turned out to be the ones who were least able to control their self-destructive tendencies over time.

In a similar study, van der Kolk et al. (1996) examined the relationship between childhood trauma and symptoms of dissociation, somatization and affect dysregulation. Three groups of individuals were compared; those abused before age 14, those abused after age 14, and those exposed to a natural disaster. The results showed significant relationships between age of trauma, type of trauma, and the clinical presentation of the participants. Specifically, those abused before age 14 had more problems modulating anger, had more dissociative and somatic symptoms, and engaged in more suicidal and self-injurious behaviors than did the group abused later or the disaster group. The later trauma group also differed significantly on these symptoms

from the disaster group. The authors emphasized that the diagnosis of PTSD alone did not capture the full extent of the trauma groups' symptoms. Some participants in all three groups met criteria for PTSD, but the traditional core criteria (re-experiencing the trauma and avoidant behaviors) did little to explain the self-destructive, dissociative, somatic, and dysregulation problems encountered in the trauma groups (and especially the early trauma group).

Roth, Newman, Pelcovitz, van der Kolk, and Mandel (1997) examined the lifetime Complex PTSD diagnoses of 234 individuals who had been abused. They differentiated between those abused physically, sexually, or both. Those whose abuse had an early onset (before age 13) were compared with those whose abuse had a late onset (after age 13). Additionally, they assessed chronicity of the abuse, which ranged from "acute" (less than one year), to "chronic" (2-42 years). Of the 234 participants, 128 were sexually abused only (117 of these were women, and 11 were men). There were a total of 67 participants who were physically abused (36 men and 31 women), and 39 who were both physically and sexually abused (36 women and 3 men).

Roth et al. (1997) compared the groups on their diagnostic status, including no diagnosis, PTSD only, Complex PTSD only, or both PTSD and Complex PTSD. Due to the small number of men in the study, the analyses conducted could not predict lifetime Complex PTSD for men. For women, several trends emerged differentiating the various group combinations. The highest risk for developing lifetime Complex PTSD existed among those who had experienced both physical and sexual abuse; this group was 14.5 times more likely to carry a diagnosis of Complex PTSD than a participant who had not experienced both types of abuse. Among the sexually abused groups (those abused before and after age 13), the rate of having both Complex PTSD and PTSD was significantly higher than the physically abused only group. Additionally, a participant who experienced both kinds of abuse was much less likely to be found to have no

diagnosis than participants in either of the other groups. Chronicity and age at onset were found to be related, with abuse tending to be more chronic for women whose abuse began before 13, and less chronic for those whose abuse began after 13. Age of onset did not predict Complex PTSD symptoms, however, which was an unexpected finding given the studies discussed previously. The authors cited methodological differences to account for this discrepancy with earlier research; this study separated sexual and physical abuse, whereas van der Kolk et al. (1996) collapsed sexual and physical abuse into age of onset categories. Roth et al. (1997) concluded that Complex PTSD might more adequately describe women who have experienced sexual abuse, as compared with those who experienced physical abuse only. They postulated that the shame and secrecy that commonly accompanies sexual abuse, along with the profound boundary violations involved, might impact victims' developing selves in ways less intrusive forms of abuse do not.

In a recent summary of the data yielded from the DSM-IV field trial, van der Kolk et al. (2005) made a case for the diagnostic category of DESNOS. The authors stated that the data support the inclusion in the diagnostic nosology of a trauma reactive syndrome that goes "…above and beyond PTSD symptomatolgy" (p. 394). Specifically, they summarized the findings as indicating that trauma that is prolonged, has an early onset, and is interpersonal in nature is associated with severe psychological sequelae, including affect dysregulation, aggression against self and others, somatic and dissociative symptoms, and character pathology. These symptoms were found to occur in addition to PTSD. The DESNOS sequelae were more likely the earlier the abuse occurred; if the abuse occurred in the first decade, DESNOS was more likely. The later the abuse occurred, the more PTSD-like the person's pathology became. These authors concluded that the extensive findings regarding comorbidity and PTSD also raise

a red flag, in that it is rare to find individuals who have a sole diagnosis of PTSD. Rather, PTSD is most commonly encountered with comorbid mood, anxiety, and somatic diagnoses. In particular, van der Kolk et al. stated, there is a dearth of treatment recommendations for PTSD that include such problems as dysregulation of the self, affect dysregulation, and dissociative symptoms.

Although studies on the relationship between trauma and DESNOS have focused mainly on individuals with childhood abuse histories, a few studies have examined combat veterans. Some studies have found that a subset of male veterans diagnosed with PTSD also frequently meet criteria for various Axis II disorders, including Borderline, Avoidant, Obsessive-Compulsive, Passive Aggressive, and Schizotypal personality disorders (Hyler, Woods, & Boudewynes, 1991; Sherwood, Funari, & Piekarski, 1990; Southwick, Yehuda, & Giller, 1993). Thus, a minority of veterans with PTSD also has more extensive pathology that goes beyond the symptoms of PTSD alone.

Ford (1999) studied 84 male military veterans who had sought inpatient treatment for psychiatric symptoms, 94% of whom had served in Vietnam. The participants met criteria for PTSD (29%), DESNOS (27%), both disorders (31%), or neither disorder (13%). The men were interviewed and extensive information gathered on both their childhood histories of abuse and neglect, as well as their specific combat experiences. Ford found that traditional combat trauma was a risk factor for PTSD, and early childhood abuse was an independent risk factor for DESNOS in this population. This was true irrespective of single or dual diagnoses of the disorders. Another interesting finding emerged regarding the type of combat trauma experienced; witnessing war atrocities was a risk factor for PTSD, however, actually participating in such

atrocities was a risk factor for DESNOS. Ford concluded that DESNOS has a distinct pathogenesis that differentiates it from PTSD.

Ford and Kidd (1998) suggested that DESNOS describes a syndrome that, unlike PTSD, represents a chronic dysfunction in the individual's sense of self, consciousness, and relationships with others. Ford (1999) speculated that the veteran participants who had engaged in atrocities had undergone a fundamental alteration in their systems of meaning, sense of self, and states of consciousness as a result of their participation. Ford suggested that this distinguished them from their counterparts who had merely witnessed the acts. The majority of the soldiers had been adolescents at the time of their combat experiences, a time in their lives when their identity would be consolidated. Thus, Ford conceptualized DESNOS as being intertwined with developmental processes.

The Relationship Between DESNOS and BPD

As the literature reviewed here has suggested, childhood trauma is associated with a number of personality disorders, yet BPD remains the disorder that is most strongly associated with CSA in the majority of studies (e.g., Battle et al., 2004; Herman et al., 1989; Zanarini et al., 1997). The studies reviewed for this paper have hinted at the connection between Complex PTSD and BPD, yet most researchers (Herman et al., 1989; Roth et al., 1997; van der Kolk et al., 2005) have been conservative in their conclusions. The criteria for DESNOS seem to describe an individual who has BPD, and the literature on trauma and BPD seems to indicate that these individuals would be prime candidates for a DESNOS diagnosis. Herman (1992) discussed such concepts as splitting of both self and object, malignant rage resulting in self-injurious behavior, interpersonal dependence leading to oscillation between intense attachment and withdrawal, loss of a coherent sense of self, and revictimization in the form of repeated interactions with abusive

others or dangerous situations, as characteristics of Complex PTSD, a cluster of symptoms that sounds distinctly like BPD. Herman concluded that these patients might be misdiagnosed with personality disorders, which might be stigmatizing, and their needs might be better served if their problems were conceptualized as stemming from trauma.

McLean and Gallop (2003) found results in keeping with Herman's views in a study comparing 65 women with abuse histories in terms of the criteria for both BPD and Complex PTSD. They compared women with early onset physical and sexual abuse (i.e., age 6 or younger) with those whose abuse began later (i.e., ages 7-12, and 13-18). McLean and Gallop found that almost all of the women who reported a history of sexual abuse met the criteria for both BPD and Complex PTSD. Additionally, both diagnoses were found to be more strongly associated with earlier rather than later onset of abuse. The early onset group differed in other ways from the later onset groups; women who had reported an early onset also reported higher rates of interfamilial abuse, higher lifetime revictimization, and higher rates of parental neglect than did those with later onsets. McLean and Gallop advocated that women with abuse histories who meet criteria for both BPD and Complex PTSD should be given the single diagnosis of Complex PTSD, which accounts for the overall symptoms, allows for treatment to be focused on trauma reactions, and is less stigmatizing than is the diagnosis of BPD.

Conclusions

The research reviewed here suggests a strong association between childhood trauma, particularly trauma that is interpersonally intrusive, pervasive and has an early onset, and severe psychopathology. The psychological sequelae often found in persons with severe childhood trauma histories include affect dysregulation, somatic symptoms, difficulties modulating anger, engaging in high risk behaviors that engender repeated exposure to danger, self harm or suicidal

behaviors, discontinuity of the sense of self, and difficulties maintaining a consistent view of others. These symptoms certainly have much in common with the characteristics often encountered in individuals diagnosed with BPD.

Trauma symptomatology may exist on a continuum, such that individuals who have been abused very early on, and who have experienced abuse and neglect by multiple caregivers, may be vulnerable to more profound expressions of that trauma, resembling character pathology. Other individuals whose abuse had a later onset, was less pervasive or confined to a single perpetrator, may display symptoms more consistent with PTSD as it currently exists in the psychiatric nosology. Often, severely traumatized individuals meet criteria for both BPD and PTSD, and thus are dually diagnosed. Sometimes such individuals carry numerous diagnoses, including somatoform, dissociative, and mood disorders in addition to personality and anxiety disorders. The proposed diagnosis of DESNOS may be a more parsimonious diagnosis for such individuals. It encompasses a vast array of symptoms that are viewed as interrelated rather than discrete. Moreover, it conceptualizes the person's difficulties as stemming from severe trauma, which may be less stigmatizing and serve as a focus for treatment that identifies relational deficits and issues of basic trust and attachment at the core of the individual's difficulties.

The Present Study

Given the common comorbid presentation of BPD and PTSD, and the more comprehensive and parsimonious nature of the DESNOS diagnosis, it is a worthwhile endeavor to further explore DESNOS as a potential diagnostic category. The present study examined, first, whether DESNOS was a better descriptor of severely traumatized individuals with significant psychopathology in multiple domains than either PTSD or BPD, or comorbid PTSD/BPD. Second, the study investigated whether client sex and/or clinician sex influence the diagnosis of

PTSD versus BPD. Specifically, are women more likely to be diagnosed with BPD, and are female clinicians more likely to recognize trauma history as relevant to the diagnostic conceptualization of the client?

The present study used a vignette methodology in which clinicians were presented with two vignettes describing individuals with severe trauma histories and psychopathology in multiple domains and were asked to assign diagnoses and rate the symptoms present in the case. The gender of the individual in each case was varied to examine the effect on diagnoses and symptom ratings. Two cases of DESNOS were used to determine whether the findings for the first case were replicated for a case of DESNOS with a somewhat different symptom presentation and to increase the likelihood of including a good example of DESNOS in the study.

The first hypothesis was that the diagnostic construct of DESNOS would be a better descriptor of the symptoms in the cases than the current diagnoses of BPD and PTSD. Specifically, it was hypothesized that the mean symptom ratings for the proposed criteria for DESNOS would be higher than the mean symptom ratings of either BPD or PTSD, or comorbid PTSD/BPD. Also, it was expected that more of the criteria for DESNOS would be endorsed by the participants than the criteria for either PTSD or BPD. The second hypothesis was that the sex of the client in the vignette would influence diagnoses, as female clients would receive more BPD diagnoses and higher ratings of BPD as being representative of the case than would male clients. The final hypothesis was that female clinicians would assign greater weight to trauma history as evidenced by their higher diagnostic ratings for PTSD, whereas male clinicians would assign less weight to trauma history with lower diagnostic ratings for PTSD.

CHAPTER 2

METHOD

Design

The study used a quasi-experimental Internet survey design. The between-subjects experimental variable was the sex of the client presented in the vignette (male versus female), which was also the primary independent variable. A secondary independent variable was the sex of the clinician. The dependent variables included: the categorical diagnoses assigned by clinicians; dimensional diagnostic ratings for the disorders of interest (BPD, PTSD); ratings for individual symptoms of BPD, PTSD, and DESNOS; as well as the mean symptom ratings for BPD, PTSD and DESNOS; and number of symptoms of each construct endorsed as present in the case. Additional information collected included ratings of diagnostic confidence, severity, prognosis, and likelihood of responding to treatment. Participants read two case vignettes, each selected to be an example of DESNOS, and results were analyzed separately for each case.

Power Analysis

In order to detect a medium effect size with desired power of .80 and alpha = .05, 64 participants were needed per group (male versus female case) (Cohen, 1992). Thus, the total number of participants needed was 128. Although no study has directly examined the effect of client sex on diagnosis for a client with DESNOS, Becker and Lamb (1994) found a medium

sized main effect (.27) in their vignette study examining the diagnosis of BPD versus PTSD, in which the sex of the client influenced the diagnosis of BPD.

Participants

Given an anticipated response rate of 10-20% based on previous studies using a similar methodology (e.g., Crosby & Sprock, 2004), 1500 psychologists were invited to participate in order to get the needed number of participants. A randomly selected national sample of 1500 doctoral level, licensed, clinical or counseling psychologists who were members of the American Psychological Association (APA) was obtained from the APA on-line membership directory for solicitation to participate in the study. It was anticipated that the sample selected would be representative of the present APA membership. In total, 368 emails (24.5% of the total sent) were returned as undeliverable due to the email addresses no longer being valid. Another 17 individuals responded and indicated they could not participate due to being primarily engaged in research, or having been retired and away from clinical practice for many years.

A total of 123 participants responded and completed the survey, making the response rate 10.8% of the 1132 emails delivered. Three participants completed the survey for one of the vignettes only, and did not complete the survey for the second vignette. These participants were included in analyses for the surveys they completed, and excluded from those they did not complete. Table 1 contains means, standard deviations, frequencies, and percentages for participant demographic information. There were slightly more male than female participants. The majority of participants were Caucasians. The number of Native Americans seems to have been larger than expected, at 11.4%. According to APA membership figures (APA [online] 2005), only about .02% of APA members identify themselves as Native Americans. Examination of the on-line survey indicated that the formatting of the ethnicity question in the survey may

have been confusing; it seemed a number of individuals might have indicated "Native American" when they were likely White participants due to the alignment of the choices on the webpage. The participants were generally middle-aged, and had an average of more than 15 years of experience. Most held either the Ph.D. or Psy.D. degree. The most frequently reported theoretical orientation was cognitive-behavioral. However, an unexpectedly large number reported a humanistic orientation whereas surprisingly few reported an eclectic approach. Examination of this item suggests that the formatting may have been confusing for this item as well. The most frequent employment setting was private practice, although a variety of settings were represented. Additional information about the types of settings in which participants worked, and the clinical populations they commonly encountered is presented in Appendix D.

Materials

Case vignettes. Two case vignettes were used for the study (see Appendices E and F). Both were selected from the literature (Luxenberg, Spinazzola, Hidalgo, Hunt, & van der Kolk, 2001) to be representative of DESNOS. The cases were presented as examples of DESNOS in a training program to help clinicians diagnose and treat DESNOS developed by the key researchers and proponents of this diagnosis (i.e., van der Kolk). Therefore, the cases are considered to be good examples of the construct. Both cases from the training program were used to ensure that a good example of DESNOS was included and to see if the findings for the first case were replicated for a second case since each case represents a somewhat different presentation of the DESNOS syndrome. The cases were edited to reduce length but maintained the essential features. There were two versions of each case (male version and female version) that differed only in the sex of the patient. Both vignettes presented individuals who had childhood histories of significant trauma (including physical and sexual abuse, and neglect), and

Table 1
Characteristics of Participants (N = 123): Means and Standard Deviations; Frequencies and Percentages

Variable	Mean (SD)
Age	49.46 (11.91)
Years of Experience	16.65 (11.60)

	Freq (%)
Gender	
Male	67 (54.5%)
Female	54 (43.9%)
Not reported	2 (1.6%)
Race/Ethnicity	
White/Non-Hispanic	90 (73.2%)
African American	7 (5.7%)
Hispanic	7 (5.7%)
Asian American/Pacific Islander	3 (2.4%)
Native American	14 (11.4%)
Other/Multiracial	3 (2.4%)
Degree	
Ph.D.	83 (67.6%)
Psy.D.	34 (27.6%)
Ed.D.	3 (3.3%)
Theoretical Orientation	
Cognitive-Behavioral	59 (48.0%)
Humanistic	31 (25.2%)
Psychodynamic	15 (12.2%)
Eclectic	11 (8.9%)
Other	7 (5.7%)
Primary Work Setting	
Private Practice	52 (42.3%)
University Academic Department	14 (11.4%)
University Medical Center	10 (8.1%)
Community Mental Health	9 (7.3%)
State Psychiatric Facility	8 (6.5%)

(Table 1 continued)

General Hospital	6 (4.9%)
Private Psychiatric Facility	4 (3.3%)
Correctional Facility	4 (3.3%)
VA Medical Center	2 (1.6%)
Other	15 (12.2%)

Note. A formatting problem for two of the survey items, ethnicity and theoretical orientation, may have led to unexpected results for these demographics. It is likely many of the Native American responses were actually intended as White, and that a number of those endorsing a humanistic orientation were more likely eclectic.

who were experiencing significant psychiatric symptoms. The target symptoms described included problems with affect regulation, dissociative symptoms, somatic symptoms, symptoms indicative of a loss of sense of self, as well as behavioral problems such as substance misuse and difficulty managing anger. The clients described in the vignettes met the proposed diagnostic criteria for DESNOS (van der Kolk et al., 2005), however, there was ambiguity inherent in the case descriptions. The literature indicates that some ambiguity is required in vignettes in order to uncover underlying processes in diagnosis, including sex bias (Becker & Lamb, 1994).

Measures

Diagnostic questionnaire. After reading each case vignette, participants were asked to rate the representativeness of a series of Axis I and II diagnoses for the case, including BPD and PTSD. DESNOS was not presented as a choice, as this diagnosis is not currently in the DSM-IV, thus it was unlikely that very many clinicians would be familiar with the diagnosis. This measure targeted the dimensional diagnostic ratings. Participants were asked to rate each diagnosis on a 7-point Likert scale (1 = *not at all representative,* 7 = *highly representative*) (see Appendix G). They were then asked to select one diagnosis as most representative of the case from the same list of DSM-IV diagnoses, and to rate their confidence in this diagnosis on a 7-point Likert scale (1 = *not at all confident*, 7 = *very confident)*. Additionally, participants were presented with a list

of symptoms of the target diagnoses (PTSD, BPD, and DESNOS), and asked to rate the descriptiveness of these on a 7-point Likert scale (1 = *not at all descriptive,* 7 = *highly descriptive*). Finally, participants were asked to rate the severity of the clients' overall condition (1 = *very mild*, 7 = *very severe*), their prognosis (1 = *very good*, 7 = *very poor*), and their likelihood of responding to treatment (1 = *not at all likely*, 7 = *very likely*).

Demographic questionnaire. After completing ratings on both vignettes, participants were asked to provide basic demographic information and information regarding their professional training and clinical experience (see Appendix H).

Thanks/Debriefing page. Upon completion of the demographic questionnaire, participants were presented with a final thank you page that included debriefing (see Appendix I). This page also provided the option for participants to enter the raffle and/or obtain study results.

Procedure

The SNAP web survey program was used to create an on-line survey website. A letter of invitation was emailed to psychologists who were members of the APA and had Internet access and email addresses listed in the APA Directory. Only licensed clinical or counseling psychologists were invited to participate, in order to limit the sample to those certified to diagnose and treat mental disorders. The invitation asked them to fill out an on-line survey regarding diagnosis (see Appendix J). The invitation included a link to one of the web pages designed for the study, along with a password, to ensure that only those psychologists invited to participate could access the web page. Once participants clicked on the link, they were presented with the consent form explaining the purpose and procedures of the study (see Appendix K). They were also informed that if they chose to participate, they could enter a raffle to win one of three $50.00 gift cards (described below) as an incentive.

Those who clicked on the button indicating that they agreed to participate were taken to a page with the instructions and the first case vignette, followed by the diagnostic questionnaire. Every participant received both vignettes, counterbalanced to control for order effects. The sex of the client in the vignette was manipulated, so that participants received either the male or female version of each case. The order of the diagnostic and symptom ratings was also counterbalanced to control for order effects. In all, there were a total of 16 survey web pages, allowing for all possible combinations of male and female versions of both Vignette A and Vignette B, and for the counterbalanced symptom ratings and diagnostic ratings. Participants were randomly assigned to one of the 16 web pages when the solicitation emails were sent (see Appendix K for an example of the questionnaire).

After reading both cases and completing the diagnostic ratings, participants were asked to complete the demographic questionnaire. When participants clicked on the submit button, the data were automatically entered into a database. They were then taken to a separate "thank you" page (see Appendix I) where participants had the option of requesting a summary of the results of the study upon completion, as well as the option of entering the raffle. Neither the participants' names nor email addresses were in any way linked or connected to the data from the questionnaires. Three gift cards for $50.00 each for Best Buy, a national chain store selling electronics and media, were raffled off to three randomly chosen winners after data collection was completed.

CHAPTER 3

RESULTS

The results were analyzed separately for each of the two case vignettes and are presented for Vignette A and then Vignette B. Frequencies and percentages describing the primary diagnoses assigned are presented, followed by means and standard deviations of the dimensional diagnostic ratings assigned. Differences between the mean symptom ratings for each of the target diagnoses (PTSD, BPD, and DESNOS), as well as the differences in the number of symptoms rated as present for these diagnoses are then described. Comorbid PTSD and BPD (PTSD/BPD) is also examined and compared to DESNOS. The effects of sex of the client, and sex of the participants, on the primary diagnosis were examined using chi-square analyses. A series of two-way analysis of variance (ANOVA) was used to explore the effects of sex of the client and sex of participants on the dependent variables, including the dimensional diagnostic ratings for PTSD and BPD; the mean symptoms ratings for PTSD, BPD and DESNOS; and the number of symptoms met for the three target diagnoses.

Multivariate analyses were used to examine whether the independent variables (sex of the client and sex of participants) were significant predictors of the diagnosis and dimensional diagnostic ratings, and if diagnosis was predicted by the PTSD and BPD symptoms in the case. The DESNOS symptoms in the case were added in a second step to determine if this construct

contributed to the prediction of the diagnosis and diagnostic ratings. Binary logistic regression analyses used the primary diagnosis as the criterion variable, with symptoms in the case (i.e., mean symptom ratings, number of symptoms met), sex of the client in the vignette, and sex of the participants as predictor variables. Multiple regression analyses used the same predictor variables to predict the dimensional diagnostic ratings of PTSD and BPD. The effects of order of the case vignettes, and order of diagnostic and symptom ratings on the dependent variables are then presented. Lastly, the effects of participant variables on the diagnoses and ratings of the cases are presented.

Vignette A

Descriptive information. Participants were asked to assign a primary categorical diagnosis (see Table 2). By far the most frequently assigned diagnosis for Vignette A was PTSD, which garnered more than half of the primary diagnoses. This was followed by BPD, which constituted nearly one-third of the diagnoses.

Participants also provided dimensional ratings of the descriptiveness of current diagnostic categories for Vignette A using a 7-point scale (1 = not at all descriptive to 7 = highly descriptive). Diagnostic ratings for the case are presented in Table 3. The diagnostic category rated as most descriptive of the case was PTSD followed by BPD, which paralleled the findings for the categorical diagnoses.

Participants used the same 7-point rating scale to rate the descriptiveness of a series of symptoms for the case, including symptoms of BPD, PTSD, and DESNOS. The mean ratings for each of the symptoms are presented in Appendix L. The most highly rated symptoms for the case included sleep difficulty, intrusive thoughts, self-harm preoccupation, and suicidal threats and gestures. However, a varied constellation of symptoms received moderate ratings.

Table 2
Primary Categorical Diagnoses Assigned for Vignette A

Diagnosis	Frequency	Valid Percent
PTSD	64	53.3
BPD	37	30.8
Bipolar Disorder	5	4.1
Major Depressive Disorder	4	3.3
Antisocial PD	3	2.5
Depressive PD	2	1.7
Other	4	3.2
Total	120	100

Note. "Other" = Avoidant PD, Dependent PD, Dissociative Identity Disorder, and Generalized Anxiety Disorder. A total of 21 diagnoses were offered as choices for the primary diagnosis (see Appendix G).

Participants also used 7-point Likert scales to rate their confidence in their assigned diagnosis (1 = *not at all confident*, 7 = *very confident*), and the client's severity (1 = *very mild*, 7 = *very severe*), prognosis (1 = *very good*, 7 = *very poor*), and likelihood of responding to treatment (1 = *not at all likely*, 7 = *very likely*). Results suggest that the participants were confident in their diagnoses, the pathology in the case was seen as severe, and the prognosis and likelihood of responding to treatment were moderate (see Appendix M).

DESNOS versus BPD and PTSD. The first hypothesis, that the mean symptom ratings would be higher for DESNOS than the mean symptom ratings for BPD or PTSD, or comorbid PTSD and BPD, was examined using independent *t*-tests to compare the mean ratings. As seen in Table 4, the mean symptom ratings were highest for PTSD, followed by BPD, with the lowest ratings for the DESNOS symptoms. Both PTSD and BPD ratings were significantly higher than

the DESNOS ratings. No significant difference was found between the PTSD and BPD symptom ratings.

Table 3
Dimensional Diagnostic Ratings for Vignette A

Diagnosis	*M*	*SD*	*N*
PTSD	6.19	1.24	119
BPD	5.07	1.83	120
Major Depression	4.59	1.80	120
Panic Disorder	3.95	2.01	118
GAD	3.28	1.74	115
Depressive PD	3.24	1.90	118
Dysthymia	3.07	1.69	119
Somatization	2.70	1.64	118
Bipolar Disorder	2.66	1.57	117
Dissociative NOS	2.66	1.81	118
Histrionic PD	2.44	1.59	117
Social Phobia	2.20	1.48	119
Avoidant PD	2.19	1.39	118
DID	2.19	1.52	118
Paranoid PD	2.13	1.45	116

Note. "GAD" = Generalized Anxiety Disorder, "DID" = Dissociative Identity Disorder. Six additional diagnoses had mean ratings that were < 2.00, and included Antisocial PD, Dependent PD, Narcissistic PD, Obsessive Compulsive PD, Schizoid PD, and Schizotypal PD.

Table 4
Comparison of Mean Symptom Ratings for PTSD, BPD, and DESNOS for Vignette A (N = 121)

	M	*SD*	*t-value*	*p*	*df*
PTSD/	5.11	0.94	17.11	<.001	120
DESNOS	4.06	0.90			
BPD/	5.05	1.00	16.67	<.001	120
DESNOS	4.06	0.90			
PTSD/	5.11	0.94	0.72	.474	120
BPD	5.05	1.00			

Note. The descriptiveness of the symptoms for the case was rated on a 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

A *t*-test was also performed to compare the mean symptom ratings of DESNOS with the mean symptom ratings of comorbid PTSD and BPD (i.e., PTSD and BPD combined; see Table 5). The mean symptom rating for comorbid PTSD/BPD was significantly higher than that the mean symptom rating for DESNOS.

Table 5
Comparison of Mean Symptom Ratings for DESNOS and Comorbid PTSD/BPD for Vignette A (N = 121)

	M	*SD*	*t-value*	*p*	*df*
PTSD&BPD/	5.09	0.87	21.70	<.001	120
DESNOS	4.06	0.90			

Note. The descriptiveness of the symptoms for the case was rated on a 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

It was also hypothesized that more of the criteria for DESNOS would be endorsed by the participants than the criteria for either PTSD or BPD, or comorbid PTSD/BPD. Symptoms for each of the three target disorders were considered to be present if they were rated as 5.00 or higher on the 7-point scale (1 = not at all descriptive to 7 = highly descriptive). Table 6 presents the mean number of symptoms rated as present in the vignette for each of the target diagnoses, as

well as the results of *t*-tests comparing the number of PTSD, BPD and DESNOS symptoms met. Participants rated significantly more PTSD criteria than BPD criteria as present in the case. They also endorsed significantly more of the criteria for DESNOS than BPD symptoms. When the number of symptoms of DESNOS was compared to the number of symptoms of PTSD and BPD combined, the mean number of symptoms of comorbid PTSD/BPD was significantly higher than the number of symptoms of DESNOS.

Table 6
Comparison of Mean Number of Symptoms Rated as Present for PTSD, BPD, and DESNOS for Vignette A (N = 121)

	M	*SD*	*t-value*	*p*	*df*
# PTSD/	11.02	3.05	20.68	<.001	121
# BPD	6.00	1.93			
# PTSD/	11.02	3.05	-1.55	.120	121
# DESNOS	11.50	4.29			
# BPD/	6.00	1.93	-18.04	<.001	121
# DESNOS	11.50	4.29			
#PTSD&BPD/	17.02	4.37	18.94	<.001	121
#DESNOS	11.50	4.29			

Note. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on the 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

However, each of the target diagnoses had a different number of possible symptoms that participants could rate. There were a total of 16 PTSD symptoms, 9 BPD symptoms, and 25 DESNOS symptoms. Therefore, the percentage of total possible symptoms was calculated, and *t*-tests were performed comparing the percentage of PTSD, BPD, and DESNOS symptoms met (see Table 7). Results indicated that the percentage of possible PTSD symptoms, percentage of possible BPD symptoms, and percentage of PTSD and BPD symptoms combined (comorbid

PTSD/BPD) rated as present in the case were significantly higher than the percentage of possible DESNOS symptoms in the case.

Table 7
Comparison of Percentages of Symptoms Rated as Present for PTSD, BPD, and DESNOS for Vignette A (N = 121)

	M	*SD*	*t-value*	*p*	*df*
% PTSD/	0.689	0.191	1.21	.230	120
% BPD	0.667	0.215			
% PTSD/	0.689	0.191	15.81	<.001	120
% DESNOS	0.460	0.172			
% BPD/	0.667	0.215	13.79	<.001	120
% DESNOS	0.460	0.172			
%PTSD&BPD/	0.681	0.175	18.94	<.001	120
% DESNOS	0.460	0.172			

Note. There were 25 DESNOS symptoms, 16 PTSD symptoms, 9 BPD symptoms, and 25 comorbid PTSD/BPD symptoms included in the survey. "% diagnosis" = the mean number of symptoms rated as present for the diagnosis divided by the total number of symptoms for the diagnosis.

Although not specified in the hypothesis, differences in the diagnostic ratings for PTSD and BPD were also compared to examine how well the current diagnoses described Vignette A (see Table 8). A paired samples *t*-test revealed that diagnostic ratings for PTSD were significantly higher than those for BPD.

Table 8
Comparison of Mean Diagnostic Ratings for PTSD and BPD for Vignette A (N = 118)

	M	*SD*	*t-value*	*p*	*df*
PTSD/	6.19	1.24	5.26	<.001	117
BPD	5.07	1.83			

Note. The descriptiveness of BPD and PTSD for the case was rated on a 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

Sex of client and sex of participant. It was hypothesized that the sex of the client and sex of the participant would influence diagnoses and ratings of the case. Specifically, it was hypothesized that female clients would receive more BPD diagnoses and higher ratings of the descriptiveness of BPD for the case compared to the male version of the vignette. The final hypothesis was that female participants would assign greater weight to trauma history as evidenced by their higher diagnostic ratings for PTSD, whereas male participants would assign less weight to trauma history with lower diagnostic ratings for PTSD.

PTSD and BPD diagnoses assigned to Vignette A for male and female versions of the case are presented in Table 9. A chi-square analysis was performed to examine differences in the primary diagnosis for the male versus female versions of Vignette A. For the purposes of this analysis, diagnoses were categorized as PTSD, BPD, and "other" which included all remaining diagnoses assigned (refer to Table 2). Although the male version of the vignette received more diagnoses of PTSD than BPD, and the female version received more diagnoses of BPD than PTSD, the effect of client sex on the primary diagnosis was not significant, χ^2 (3, N = 120) = 2.11, p = .35.

Table 9
Primary Categorical Diagnosis Assigned for Vignette A, According to Sex of the Client (N = 120)

	Sex of Client	
	Male (n = 62)	Female (n = 58)
PTSD	34	30
BPD	16	21
All Other Diagnoses	12	7

Note. See Table 2 for a list of other diagnoses assigned to Vignette A.

A chi-square analysis was also conducted to examine the effect of sex of the participant on the primary diagnosis using the three categories (i.e., PTSD, BPD, other diagnoses); see Table 10. Both male and female participants diagnosed PTSD more often than BPD, and there was not a significant effect of participant sex on the assigned diagnosis, χ^2 (3, N = 118) = 0.61, p = .74.

Table 10
Primary Categorical Diagnosis Assigned for Vignette A, by Male and Female Participants (N = 118)

	Sex of Participant	
	Male (n = 65)	Female (n = 53)
PTSD	34	29
BPD	19	17
All Other Diagnoses	12	7

Note. See Table 2 for a list of other diagnoses assigned to Vignette A.

A series of two-way analyses of variance (ANOVA) was used to analyze main and interaction effects of sex of the client in the vignette and sex of the participants on the diagnostic ratings for PTSD and BPD, and for the mean symptom ratings and number of symptoms met for PTSD, BPD, and DESNOS. The diagnostic ratings for PTSD and BPD based on sex of the client and sex of the participant are presented in Table 11. For the diagnostic ratings for PTSD, no significant effects were found for client sex, F(1, 116) = 0.154, p = .695, participant sex, F(1, 116) = 0.181, p = .671, or their interaction, F(1, 116) = 0.781, p = .379. For the BPD diagnostic ratings, no significant main effects were found for client sex, F(1, 117) = 3.59, p = .061, or participant sex, F(1, 117) = 0.012, p = .915. There was a significant interaction of participant sex and client sex, F(1, 117) = 6.46, p = .012, although the effect size was small (partial eta squared

= .054). Male participants gave higher BPD diagnostic ratings when the client in the vignette was male, whereas female participants gave higher diagnostic ratings for BPD when the client in the vignette was female.

Table 11
Mean Diagnostic Ratings for PTSD and BPD According to Sex of Participant and Sex of Client in Vignette A

		Sex of Client		
		Male	Female	Total
PTSD				
	Male participants	6.00	6.30	6.14
	Female participants	6.30	6.19	6.25
	All participants	6.15	6.25	6.19
BPD				
	Male participants	5.11	4.90	5.01
	Female participants	4.30	5.78	5.04
	All participants	4.71	5.34	5.03

The mean symptom ratings for PTSD, BPD, and DESNOS based on sex of the client and sex of the participant are presented in Table 12. For the mean PTSD symptom ratings, there was not a significant effect of client sex, $F(1,118) = 0.093$, $p = .761$. However, there was a significant main effect of participant sex; women gave significantly higher PTSD symptom ratings than did men, $F(1, 118) = 8.07$, $p = .005$ (partial eta squared = .066, medium effect size). There was not a significant interaction between participant sex and sex of the client for the PTSD symptom ratings, $F(1,118) = 0.797$, $p = .374$. For the mean BPD symptom ratings, there was not a significant effect of client sex, $F(1,118) = 0.475$, $p = .492$, or participant sex, $F(1,118) = 1.74$,

p = .190. The interaction approached significance, $F(1, 118) = 3.65$, p = .059, with male participants assigning higher BPD mean symptom ratings to male clients, and female participants assigning higher BPD mean symptom ratings to female clients. No significant results were found for the DESNOS mean symptom ratings for the sex of the client in the vignettes, $F(1,118) = 0.005$, p = .946, sex of participants, $F(1,118) = 0.081$, p = .776, or the interaction between the two variables, $F(1,118) = 0.552$, p = .459.

Table 12
Mean Symptom Ratings for PTSD, BPD and DESNOS According to Sex of Participant and Sex of Client in Vignette A

	Sex of Client		
	Male	Female	Total
PTSD			
Male participants	4.97	4.87	4.92
Female participants	5.29	5.49	5.39
All participants	5.13	5.18	5.15
BPD			
Male participants	5.06	4.84	4.95
Female participants	4.96	5.43	5.19
All participants	5.01	5.14	5.07
DESNOS			
Male participants	4.10	3.99	4.05
Female participants	4.03	4.16	4.09
All participants	4.07	4.08	4.07

Table 13 presents the number of PTSD, BPD, and DESNOS symptoms met based on sex of the client in the vignette and sex of the participant. For the number of PTSD symptoms met, there was a significant effect of sex of the participant, $F(1, 118) = 7.96$, $p = .006$ (partial eta squared = .065, medium effect size), with female participants endorsing significantly more PTSD symptoms as present than did male participants. There was not a significant effect of sex of the client in the vignette, $F(1, 118) = 0.032$, $p = .858$, nor a significant interaction, $F(1,118) = 1.01$, $p = .318$. For the number of BPD symptoms met, there was not a significant effect of sex of the client in the vignette, $F(1, 118) = 0.285$, $p = .595$. The effect of the sex of the participant approached significance, $F(1, 118) = 3.64$, $p = .059$. There was a small but significant interaction between sex of the participant and sex of the client in the vignette, $F(1, 118) = 5.52$, $p = .021$ (partial eta squared = .046). These results paralleled those for the mean symptom ratings for BPD, with male participants endorsing more BPD symptoms when the client in the vignette was male, and female participants endorsing more BPD symptoms when the client in the vignette was female. For the DESNOS symptoms met variable, there was not a significant effect for client sex, $F(1, 118) = 0.039$, $p = .845$, or participant sex, $F(1, 118) = 0.097$, $p = .756$, nor was there a significant interaction between these variables, $F(1, 118) = 0.814$, $p = .369$.

Multivariate analyses. Multivariate analyses were used to determine the contribution of the independent variables (sex of client, sex of participant) and the symptom ratings (i.e., mean symptom ratings, number of symptoms) in predicting the primary diagnosis and dimensional ratings of BPD and PTSD. Binary logistic regression analysis was performed with the primary diagnosis as the dependent variable. PTSD and BPD were the two levels of this DV (other diagnoses were eliminated for this analysis). Predictor variables included sex of the client in the vignette, sex of the participant, mean symptom ratings of PTSD, and mean symptom ratings of

BPD. In addition to these variables, a second step added the mean symptom ratings for DESNOS. A total of 99 cases were analyzed and the two-step model successfully predicted the primary diagnosis (omnibus chi-square = 41.86, $df = 5$, $p < .001$). The model accounted for between 34.5 and 47% of the variance (Cox & Snell R Square = .345; Negelkerke R Square = .472), with 88.9% of PTSD diagnoses successfully predicted, and 58.3% of the BPD diagnoses

Table 13
Mean Number of Symptoms Rated as Present for PTSD, BPD and DESNOS According to Sex of Participant and Sex of Client in Vignette A

	Sex of client		
	Male	Female	Total
PTSD Sxs Met			
Male participants	10.58	10.13	10.36
Female participants	11.58	12.22	11.90
All participants	11.08	11.18	11.13
BPD Sxs Met			
Male participants	6.00	5.37	5.68
Female participants	5.85	6.85	6.35
All participants	5.92	6.11	6.02
DESNOS Sxs Met			
Male participants	11.67	11.10	11.38
Female participants	11.19	12.07	11.63
All participants	11.43	11.58	11.51

Note. "Sxs Met" = the mean number of symptoms rated as present for this disorder. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on the 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

successfully predicted. Overall, 77.8% of predictions were accurate which represents an improvement over base rates (63.4%) of 14.4%. Table 14 provides coefficients, the Wald statistic, associated degrees of freedom and probability values for each of the predictor variables. As can be seen, only the mean symptom ratings for PTSD and for BPD were significant predictors of the primary diagnosis, in both the step 1 and step 2 procedures.

Table 14
Logistic Regression Analysis for Variables Predicting Primary Diagnosis of PTSD and BPD for Vignette A: Mean Symptom Ratings (N = 99)

	B	SE	Wald	*df*	*p*
Variable					
Step 1					
Sex of Client	-0.244	.523	0.218	1	.641
Sex of Participant	-0.357	.541	0.435	1	.509
Mean Sxs PTSD	2.091	.513	16.593	1	<.001
Mean Sxs BPD	-2.098	.479	19.171	1	<.001
Step 2					
Sex of Client	-0.159	.537	0.088	1	.767
Sex of Participant	-0.145	.556	0.068	1	.794
Mean Sxs PTSD	1.785	.533	11.199	1	.001
Mean Sxs BPD	-2.791	.659	17.939	1	<.001
Mean Sxs DESNOS	1.127	.630	3.201	1	.074

Note. "Mean Sxs" = mean symptom ratings for this diagnosis.

A second binary logistic regression analysis predicting a diagnosis of BPD versus PTSD utilized the number of PTSD and BPD symptoms rated as present in the case, in addition to the

sex of the client in the vignette and sex of the participant (see Table 15). A second step added the number of symptoms of DESNOS rated as present in the case. A total of 99 cases were analyzed and the two-step model successfully predicted the primary diagnosis (omnibus chi-square = 23.33, *df* = 5, $p < .001$). The model accounted for between 21% and 28.7% of the variance (Cox & Snell *R* Square = .21; Negelkerke *R* Square = .287), with 85.7% of PTSD diagnoses successfully predicted, and 50% of the BPD diagnoses successfully predicted.

Table 15
Logistic Regression Analysis for Variables Predicting Primary Diagnosis of PTSD and BPD for Vignette A: Mean Number of Symptoms Rated as Present (N = 99)

	B	SE	Wald	*df*	*p*
Variable					
Step 1					
Sex of Client	-0.227	.474	0.230	1	.632
Sex of Participant	-0.193	.474	0.150	1	.699
Sxs met PTSD	0.351	.112	9.795	1	.002
Sxs met BPD	-0.635	.167	14.509	1	<.001
Step 2					
Sex of Client	-0.213	.476	0.201	1	.654
Sex of Participant	0.111	.508	0.047	1	.828
Sxs met PTSD	0.311	.121	6.628	1	.010
Sxs met BPD	-0.723	.199	13.245	1	<.001
Sxs met DESNOS	0.076	.088	0.754	1	.385

Note. "Sxs met" = the mean number of symptoms endorsed to meet criteria for the diagnosis. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on a 1-7 scale.

Overall, 72.7% of predictions were accurate which represents an improvement over base rates (63.4%) of 9.3%. Coefficients, the Wald statistic, associated degrees of freedom and probability values for each of the predictor variables are shown. The mean number of symptoms rated as present for PTSD and for BPD successfully predicted the primary diagnosis in both the step 1 and step 2 procedures. The sex of the client, sex of the participant, and the mean number of DESNOS symptoms were not significant predictors of the primary diagnosis.

Table 16
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of PTSD for Vignette A: Mean Symptom Ratings

Variable

Step 1	ß	*t*	*p*
Mean Sxs PTSD	.562	5.250	<.001
Mean Sxs BPD	-.294	-2.801	.006
Sex of Client	.058	0.686	.494
Sex of Participant	-.057	-0.660	.511
R = .449, R^2 = .201, Adjusted R^2 = .173			
Step 2			
Mean Sxs PTSD	.638	4.966	<.001
Mean Sxs BPD	-.206	-1.544	.125
Mean Sxs DESNOS	-.169	-1.066	.289
Sex of Client	.052	0.613	.541
Sex of Participant	-.083	-0.923	.358
R = .458, R^2 = .209, Adjusted R^2 = .174			

Note. "Mean Sxs" = mean symptom ratings for this disorder.

A series of multiple regression analyses was conducted for Vignette A, with the dimensional diagnostic ratings for PTSD and then BPD as the criterion variables. Table 16 illustrates results for the first regression, with PTSD diagnostic ratings as the criterion. The first step included mean symptom ratings for PTSD and BPD, the sex of client, and sex of participants as predictor variables. A second step added the mean symptom ratings for DESNOS. The first model was significant in predicting the mean diagnostic ratings of PTSD, $F(4, 116) = 7.06$, $p < .001$, as was the two step model, $F(5, 116) = 5.88$, $p < .001$. In both steps, the PTSD symptom ratings were significant, and the best predictors of the diagnostic ratings for PTSD. The BPD mean symptom ratings were a significant predictor in the first model, with lower BPD symptom ratings predicting higher PTSD diagnostic ratings. When the DESNOS symptom ratings were added in the second step, the BPD symptom ratings were no longer significant. The DESNOS symptom ratings, sex of the client, and sex of the participant were not significant predictors of PTSD diagnostic ratings.

Using the same predictor variables in two steps, a second regression was performed with BPD diagnostic ratings as the criterion variable (see Table 17). The first model was significant for predicting the diagnostic ratings of BPD, $F(4, 117) = 8.35$, $p < .001$. Only the mean symptoms ratings for BPD proved a significant predictor; PTSD symptom ratings, sex of the client, and sex of the participant were not significant. The second step model was also significant, $F(5, 117) = 9.42$, $p < .001$, with both BPD symptom ratings and DESNOS symptom ratings emerging as significant predictors of BPD diagnostic ratings. BPD symptom ratings were positively correlated with BPD diagnostic ratings, whereas lower DESNOS symptom ratings were predictive of higher BPD diagnostic ratings.

Table 17
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of BPD for Vignette A: Mean Symptom Ratings

Variable			
Step 1	ß	*t*	*p*
Mean Sxs PTSD	-.150	-1.432	.155
Mean Sxs BPD	.526	5.153	<.001
Sex of Client	.127	1.539	.127
Sex of Participant	-.019	-0.224	.823
R = .544, R^2 = .296, Adjusted R^2 = .265			
Step 2	ß	*t*	*p*
Mean Sxs PTSD	.074	0.609	.544
Mean Sxs BPD	.777	6.260	<.001
Mean Sxs DESNOS	-.489	-3.289	.001
Sex of Client	.113	1.416	.160
Sex of Participant	-.092	-1.076	.284
R = .478, R^2 = .228, Adjusted R^2 = .201			

Note. "Mean Sxs" = mean symptom ratings for this disorder.

Another set of regressions was performed with the diagnostic ratings for PTSD and then BPD as the criterion variables using the number of symptoms rated as present for the target diagnoses as the predictor variables. The first step included the sex of the client and sex of the participants, number of PTSD and BPD symptoms met, and the second step added the number of DESNOS symptoms met. Table 18 displays results for the first regression in which diagnostic ratings for PTSD was the criterion variable. The first step model was significant, $F(4, 116) = 7.95$, $p < .001$, and the two-step model remained significant, $F(5, 116) = 6.31$, $p < .001$. Both the

Table 18
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of PTSD for Vignette A: Mean Number of Symptoms Rated as Present

Variable			
Step 1	ß	*t*	*p*
Sxs met PTSD	.546	5.587	<.001
Sxs met BPD	-.265	-2.749	.007
Sex of Client	.060	0.714	.477
Sex of Participant	-.042	-0.484	.630

R = .470, R^2 = .221, Adjusted R^2 = .193

Variable			
Step 2	ß	*t*	*p*
Sxs met PTSD	.546	4.921	<.001
Sxs met BPD	-.264	-2.287	.024
Sxs met DESNOS	-.002	-0.018	.986
Sex of Client	.060	0.711	.479
Sex of Participant	-.042	-0.472	.638

R = .470, R^2 = .221, Adjusted R^2 = .186
Note. "Sxs met" = the mean number of symptoms endorsed to meet criteria for the diagnosis. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on a 1-7 scale.

number of PTSD and the number of BPD symptoms emerged as significant predictors of diagnostic ratings for PTSD in both models. The number of PTSD symptoms was the best predictor of PTSD diagnostic ratings. Lower number of BPD symptoms predicted higher PTSD diagnostic ratings. Neither sex of the client nor sex of the participants were significant predictors

in either step, and the number of DESNOS symptoms was not a significant predictor of PTSD diagnostic ratings.

Using the same predictor variables in two steps, a regression analysis was performed with BPD diagnostic ratings as the criterion variable (see Table 19). The first step model was

Table 19
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of BPD for Vignette A: Mean Number of Symptoms Rated as Present

Variable Step 1	ß	*t*	*p*
Sxs met PTSD	-.040	-0.399	.691
Sxs met BPD	.432	4.424	<.001
Sex of Client	.137	1.62	.108
Sex of Participant	-.058	-0.658	.512

R = .435, R^2 = .189, Adjusted R^2 = .161

Variable Step 2	ß	*t*	*p*
Sxs met PTSD	.057	0.511	.610
Sxs met BPD	.540	4.755	<.001
Sxs met DESNOS	-.230	-1.813	.072
Sex of Client	.137	1.620	.106
Sex of Participant	-.093	-1.047	.298

R = .461, R^2 = .213, Adjusted R^2 = .177
Note. "Sxs met" = the mean number of symptoms endorsed to meet criteria for the diagnosis. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on a 1-7 scale.

significant for predicting the diagnostic ratings of BPD, $F(4, 117) = 6.60$, $p < .001$, as was the model in the second step, $F(5, 117) = 6.04$, $p < .001$. Only the number of symptoms met for BPD proved a significant predictor of BPD diagnostic ratings in both models. PTSD symptoms met, DESNOS symptoms met, sex of the client, and sex of the participant were all not significant.

Vignette B

Descriptive information. Participants were asked to assign a primary categorical diagnosis (see Table 20). The most frequently assigned diagnosis for Vignette B was PTSD, which received 67.5% of the primary diagnoses, suggesting that the majority of participants saw the case as PTSD. This was followed by Major Depressive Disorder, which received nearly 10%. Borderline Personality Disorder received only 6.5% of the primary diagnoses.

Table 20
Primary Categorical Diagnoses Assigned for Vignette B

Diagnosis	Frequency	Valid Percent
PTSD	83	67.5
Major Depressive Disorder	12	9.8
BPD	8	6.5
Depressive PD	7	5.7
Somatization Disorder	4	3.3
Dysthymia	3	2.4
Other	3	.24
Total	120	100

Note. "Other" = Bipolar Disorder, Histrionic Personality Disorder, and Paranoid Personality Disorder. A total of 21 diagnoses were offered as choices for the primary diagnosis (see Appendix G).

Participants also provided dimensional ratings of the descriptiveness of current diagnostic categories for Vignette B using a 7-point scale (1 = not at all descriptive to 7 = highly descriptive). Diagnostic ratings for the case are presented in Table 21. The diagnostic category rated as most descriptive of the case was PTSD, whereas other diagnoses were rated as much less descriptive of the case. Together with the assigned diagnoses, these results suggest that participants generally viewed this case as an example of PTSD.

Table 21
Dimensional Diagnostic Ratings for Vignette B

Diagnosis	*M*	*SD*	*N*
PTSD	5.91	1.41	119
Somatization	3.98	1.85	118
Major Depression	3.94	1.95	120
Dysthymia	3.38	1.72	118
BPD	3.34	1.97	118
Depressive PD	2.68	1.76	119
GAD	2.44	1.37	117
Avoidant PD	2.21	1.56	117
Social Phobia	2.10	1.45	116
Bipolar Disorder	2.03	1.35	118

Note. "GAD" = Generalized Anxiety Disorder. Eleven additional diagnoses had mean ratings that were < 2.00, and included Antisocial PD, Dependent PD, Dissociative Identity Disorder, Dissociative Disorder NOS, Histrionic PD, Narcissistic PD, Obsessive Compulsive PD, Panic Disorder, Paranoid PD, Schizoid PD, and Schizotypal PD.

Participants used the same 7-point rating scale to rate the descriptiveness of a series of symptoms for the case, including symptoms of BPD, PTSD, and DESNOS. The mean ratings for

each of the symptoms are presented in Appendix N. The highest rated symptoms from all three target diagnoses related to anger problems, although other symptoms from all three diagnoses received moderate ratings.

Participants also used 7-point Likert scales to rate their confidence in their diagnosis (1 = *not at all confident*, 7 = *very confident*), and the client's severity (1 = *very mild*, 7 = *very severe*), prognosis (1 = *very good*, 7 = *very poor*), and likelihood of responding to treatment (1 = *not at all likely*, 7 = *very likely*). Results suggest that the participants were confident in their diagnoses, the pathology in the case was seen as moderately severe, and the prognosis and likelihood of responding to treatment were rated as moderate (see Appendix M).

DESNOS versus BPD and PTSD. The first hypothesis, that the mean symptom ratings would be higher for DESNOS than the mean symptom ratings for BPD or PTSD, or comorbid PTSD/BPD, was examined using independent *t*-tests to compare the mean ratings. As seen in Table 22, the mean symptom ratings between the three diagnoses were quite similar. No significant differences were found between the PTSD and DESNOS symptom ratings, BPD and DESNOS symptom ratings, or between the PTSD and BPD ratings.

Table 22
Comparison of Mean Symptom Ratings for PTSD, BPD, and DESNOS for Vignette B (N = 121)

	M	*SD*	*t-value*	*p*	*df*
PTSD/	3.84	1.05	1.650	.102	120
DESNOS	3.73	1.01			
BPD/	3.79	1.14	1.190	.236	120
DESNOS	3.73	1.01			
PTSD/	3.84	1.05	0.593	.554	120
BPD	3.79	1.14			

Note. The descriptiveness of the symptoms for the case was rated on a 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

A *t*-test was also performed to compare the mean symptom ratings of DESNOS with the mean symptom ratings for comorbid PTSD/BPD (PTSD and BPD combined; see Table 23). There was not a significant difference found between the DESNOS mean symptom ratings and the mean symptom ratings for comorbid PTSD/BPD for Vignette B.

Table 23
Comparison of Mean Symptom Ratings for DESNOS and Comorbid PTSD/BPD for Vignette B (N = 121)

	M	*SD*	*t-value*	*p*	*df*
PTSD&BPD/	3.83	1.02	1.88	.063	120
DESNOS	3.74	1.01			

Note. The descriptiveness of the symptoms for the case was rated on a 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

It was also hypothesized that more of the criteria for DESNOS would be endorsed by the participants than the criteria for either PTSD or BPD, or comorbid PTSD/BPD. Table 24 presents the mean number of symptoms rated as meeting criteria for each of the target diagnoses as well as the results of *t*-tests comparing the number of PTSD, BPD and DESNOS symptoms met. Participants rated significantly more PTSD criteria than BPD criteria as present in the case. They also endorsed significantly more of the criteria for DESNOS than either PTSD or BPD symptoms. There was not a significant difference for DESNOS and comorbid PTSD/BPD.

However, each of the target diagnoses had a different number of possible symptoms that participants could rate. There were a total of 16 PTSD symptoms, 9 BPD symptoms, and 25 DESNOS symptoms. Therefore, the percentage of total possible symptoms was calculated, and *t*-tests were performed comparing the percentage of PTSD, BPD, and DESNOS symptoms met (see Table 25). There was not a significant difference in the percentages of symptoms of PTSD, BPD, and DESNOS rated as present in the case. Because the number of symptoms of comorbid

PTSD/BPD and DESNOS are the same (i.e., 25), the results were the same as for number of symptoms (i.e., not significant).

Table 24
Comparison of Mean Number of Symptoms Rated as Present for PTSD, BPD, and DESNOS for Vignette B (N = 121)

	M	*SD*	*t-value*	*p*	*df*
# PTSD/	6.43	3.53	9.930	<.001	118
# BPD	3.68	2.10			
# PTSD/	6.43	3.53	-10.140	<.001	118
# DESNOS	10.11	5.06			
#BPD/	3.68	2.10	-18.750	<.001	120
# DESNOS	10.11	5.06			
#PTSD&BPD/	10.12	4.96	0.026	.979	118
#DESNOS	10.11	5.06			

Note. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on the 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

Table 25
Comparison of Percentages of Symptoms Rated as Present for PTSD, BPD, and DESNOS for Vignette B (N = 121)

	M	*SD*	*t-value*	*p*	*df*
% PTSD/	0.409	0.220	-0.400	.690	118
% BPD	0.410	0.233			
% PTSD/	0.409	0.220	0.154	.878	118
% DESNOS	0.404	0.202			
% BPD/	0.410	0.233	0.400	.690	118
% DESNOS	0.404	0.202			
% PTSD&BPD/	0.405	0.199	0.026	.979	118
% DESNOS	0.404	0.202			

Note. There were 25 DESNOS symptoms, 16 PTSD symptoms, and 9 BPD symptoms included in the survey. "% diagnosis" = the mean number of symptoms rated as present for the diagnosis divided by the total number of symptoms for the diagnosis.

Although not specified in the hypothesis, differences in the diagnostic ratings for PTSD and BPD were also compared to examine how well the current diagnoses described Vignette B (see Table 26). A paired samples *t*-test revealed that diagnostic ratings for PTSD were significantly higher than those for BPD.

Table 26
Comparison of Mean Diagnostic Ratings for PTSD and BPD for Vignette B (N = 118)

	M	*SD*	*t-value*	*p*	*df*
PTSD/	5.91	1.42	11.50	<.001	115
BPD	3.34	1.98			

Note. The descriptiveness of BPD and PTSD for the case was rated on a 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

Sex of client and sex of participant. It was hypothesized that the sex of the client and sex of the participant would influence diagnoses and ratings of the case. Specifically, it was hypothesized that female clients would receive more BPD diagnoses and higher ratings of the descriptiveness of BPD for the case compared to the male version of the vignette. The final hypothesis was that female participants would assign greater weight to trauma history as evidenced by their higher diagnostic ratings for PTSD, whereas male participants would assign less weight to trauma history with lower diagnostic ratings for PTSD.

A chi-square analysis was performed to examine differences in the primary diagnoses assigned for the male versus female versions of Vignette B. For the purpose of this analysis, diagnoses were categorized as PTSD, MDD, BPD, and "other." MDD was added as a separate category because it was the second most frequent diagnosis for this vignette. Table 27 presents the primary diagnoses assigned for Vignette B according to sex of the client in the vignette (refer to Table 21 for a listing of "other" diagnoses). A significant effect was found for client sex on

the primary diagnosis, χ^2 (4, N = 120) = 9.28, p = .026. The female version of the case received all of the BPD diagnoses whereas the male version of the case was not diagnosed as BPD.

Table 27
Primary Categorical Diagnosis Assigned for Vignette B, According to Sex of the Client (N = 120)

	Sex of Client	
	Male (n = 58)	Female (n = 62)
PTSD	41	42
MDD	8	4
BPD	0	8
All Other Diagnoses	9	8

Note. See Table 21 for a list of other diagnoses assigned to Vignette B.

Table 28
Primary Categorical Diagnosis Assigned for Vignette B, by Male and Female Participants (N = 118)

	Sex of Participant	
	Male (n = 66)	Female (n = 52)
PTSD	44	37
MDD	5	7
BPD	4	4
All Other Diagnoses	13	4

Note. See Table 21 for a list of other diagnoses assigned to Vignette B.

A chi-square analysis was also conducted to examine the effect of sex of the participant on the primary diagnosis using the same four categories (i.e., PTSD, MDD, BPD, other diagnoses); see Table 28. Both male and female participants diagnosed PTSD more often than

BPD, and the effect of participant sex on the assigned diagnosis was not significant, χ^2 (4, N = 118) = 4.10, p = .251.

A series of two-way analyses of variance (ANOVA) was used to analyze main and interaction effects of sex of the client in the vignette and sex of the participants on the diagnostic ratings for PTSD and BPD, and for the mean symptom ratings and number of symptoms for PTSD, BPD, and DESNOS. The diagnostic ratings for PTSD and BPD based on sex of the client and sex of the participant are presented in Table 29. For the diagnostic ratings for PTSD, no significant effects were found for client sex, F(1, 116) = 0.001, p = .971, participant sex, F(1, 116) = 0.014, p = .906, or their interaction, F(1, 116) = 2.70, p = .103. For the diagnostic ratings for BPD, there was a small but significant main effect of participant sex, F(1, 115) = 7.02,

Table 29
Mean Diagnostic Ratings for PTSD and BPD According to Sex of Participant and Sex of Client in Vignette B

	Sex of Client		
	Male	Female	Total
PTSD			
Male participants	6.16	5.71	5.94
Female participants	5.70	6.12	5.90
All participants	5.93	5.92	5.92
BPD			
Male participants	3.52	3.89	3.70
Female participants	2.63	2.88	2.76
All participants	3.07	3.38	3.29

p = .009 (partial eta squared = .059). Male participants assigned higher BPD diagnostic ratings overall than did female participants. There was not a significant effect of client sex on the BPD ratings, $F(1, 116) = 0.751$, p = .388, nor a significant interaction between client sex and participant sex, $F(1, 116) = 0.027$, p = .869.

Table 30
Mean Symptom Ratings for PTSD, BPD and DESNOS According to Sex of Participant and Sex of Client in Vignette B

	Sex of Client		
	Male	Female	Total
PTSD			
Male participants	3.99	3.75	3.87
Female participants	3.88	3.80	3.84
All participants	3.93	3.77	3.85
BPD			
Male participants	4.04	3.69	3.86
Female participants	3.76	3.74	3.75
All participants	3.90	3.72	3.81
DESNOS			
Male participants	3.92	3.63	3.78
Female participants	3.72	3.73	3.73
All participants	3.82	3.68	3.75

The mean symptom ratings for PTSD, BPD, and DESNOS based on sex of the client and sex of the participant are presented in Table 30. For the mean PTSD symptom ratings, there was

Table 31

Mean Number of Symptoms Rated as Present for PTSD, BPD and DESNOS According to Sex of Participant and Sex of Client in Vignette B

	Sex of Client		
	Male	Female	Total
PTSD Sxs Met			
Male participants	6.77	6.38	6.58
Female participants	6.41	6.27	6.34
All participants	6.59	6.33	6.46
BPD Sxs Met			
Male participants	3.97	3.63	3.80
Female participants	3.78	3.46	3.62
All participants	3.87	3.55	3.71
DESNOS Sxs Met			
Male participants	10.90	9.74	10.32
Female participants	10.00	10.31	10.15
All participants	10.45	10.03	10.24

Note. "Sxs Met" = the mean number of symptoms rated as present for this disorder. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on the 7-point scale (1 = not at all descriptive to 7 = highly descriptive).

not a significant effect of client sex, $F(1,118) = 0.644$, $p = .424$, participant sex, $F(1, 118) = 0.027$, $p = .869$, nor a significant interaction between these variables, $F(1,118) = 0.165$, $p = .685$. For the mean BPD symptom ratings, client sex, $F(1,118) = 0.751$, $p = .388$, participant sex, $F(1,118) = 0.264$, $p = .608$, and their interaction, $F(1, 118) = 0.652$, $p = .421$, were all not significant. No significant results were found for the DESNOS mean symptom ratings for the sex

of the client, $F(1,118) = 0.545$, $p = .462$, sex of participants, $F(1,118) = 0.069$, $p = .794$, or their interaction, $F(1,118) = 0.644$, $p = .424$.

Table 31 presents the number of PTSD, BPD, and DESNOS symptoms met based on sex of the client in the vignette and sex of the participant. For the number of PTSD symptoms, there was not a significant effect of sex of the client in the vignette, $F(1, 116) = 0.155$, $p = .695$, sex of the participant, $F(1, 116) = 0.126$, $p = .723$, or their interaction, $F(1, 116) = 0.034$, $p = .853$. There also was not a significant effect of client sex, $F(1, 118) = 0.689$, $p = .408$, participant sex, $F(1, 118) = 0.204$, $p = .652$, or their interaction, $F(1, 118) = 0.001$, $p = .977$, on BPD symptoms in the case. For the number of DESNOS symptoms, there was not a significant effect for client sex, $F(1, 118) = 0.196$, $p = .659$, or participant sex, $F(1, 118) = 0.581$, $p = .447$, nor was there a significant interaction between these variables, $F(1, 118) = 0.581$, $p = .447$.

Multivariate analyses. Multivariate analyses were used to determine which variables were significant predictors of a diagnosis of BPD versus PTSD, as well as dimensional ratings of BPD and PTSD. Binary logistic regression analysis was performed with the primary diagnosis as the dependent variable. PTSD and BPD were the two levels of this dependent variable (other diagnoses were eliminated for this analysis). Predictor variables included sex of the client in the vignette, sex of the participant, mean symptom ratings of PTSD, and mean symptom ratings of BPD. In addition to these variables, a second step added the mean symptom ratings for DESNOS. A total of 89 cases were analyzed and the two-step model successfully predicted primary diagnosis (omnibus chi-square = 14.98, $df = 5$, $p = .010$). The model accounted for between 15.5 and 34.2% of the variance (Cox & Snell R Square = .155; Negelkerke R Square = .342) with 98.8% of PTSD diagnoses successfully predicted, and 12.5% of the BPD diagnoses successfully predicted. Overall, 91% of predictions were accurate which represents an

improvement over base rates (63.4%) of 27.6%. Table 32 provides coefficients, the Wald statistic, associated degrees of freedom and probability values for each of the predictor variables. The mean symptom ratings for PTSD were significant predictors of the primary diagnosis in the step 1 procedure. After the addition of the DESNOS mean symptom ratings in the second step procedure, the PTSD mean symptom ratings were no longer significant. None of the other predictor variables were found to be significant predictors in either step.

Table 32
Logistic Regression Analysis for Variables Predicting Primary Diagnosis of PTSD and BPD for Vignette B: Mean Symptom Ratings (N = 89)

	B	SE	Wald	*df*	*p*
Variable					
Step 1					
Sex of Client	-19.388	6165.726	0.000	1	.997
Sex of Participant	0.044	.823	0.003	1	.958
Mean Sxs PTSD	1.270	.622	4.171	1	.041
Mean Sxs BPD	-0.927	.543	2.916	1	.088
Step 2					
Sex of Client	-19.410	6163.782	0.000	1	.997
Sex of Participant	0.052	.825	0.004	1	.950
Mean Sxs PTSD	1.204	.769	2.447	1	.118
Mean Sxs BPD	-0.999	.745	1.798	1	.180
Mean Sxs DESNOS	0.154	1.083	0.020	1	.887

Note. "Mean Sxs" = mean symptom ratings for this diagnosis.

A second binary logistic regression analysis predicting a diagnosis of BPD versus PTSD utilized the mean number of PTSD and BPD symptoms rated as present in the case, in addition to the sex of the client in the vignette and sex of the participant. A second step added the mean number of symptoms of DESNOS rated as present in the case. A total of 87 cases were analyzed

Table 33
Logistic Regression Analysis for Variables Predicting Primary Diagnosis of PTSD and BPD for Vignette B: Mean Number of Symptoms Rated as Present (N = 87)

	B	SE	Wald	*df*	*p*
Variable					
Step 1					
Sex of Client	-19.670	6221.648	0.000	1	.997
Sex of Participant	-0.105	.830	0.016	1	.899
Sxs met PTSD	0.294	.183	2.591	1	.107
Sxs met BPD	-0.360	.236	2.326	1	.127
Step 2					
Sex of Client	-19.753	6189.847	0.000	1	.997
Sex of Participant	-0.091	.828	0.012	1	.913
Sxs met PTSD	0.242	.208	1.352	1	.245
Sxs met BPD	-0.459	.322	2.030	1	.154
Sxs met DESNOS	0.081	.174	0.216	1	.642

Note. "Sxs met" = the mean number of symptoms endorsed to meet criteria for the diagnosis. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on a 1-7 scale.

and the two-step model successfully predicted primary diagnosis (omnibus chi-square = 14.13, *df* = 5, *p* = .015). The model accounted for between 15% and 32.7% of the variance (Cox & Snell *R*

Square = .150; Negelkerke *R* Square = .327), with 100% of PTSD diagnoses successfully predicted, and 0% of the BPD diagnoses successfully predicted. Overall, 90.8% of predictions were accurate which represents an improvement over base rates (63.4%) of 27.4%. Coefficients, the Wald statistic, associated degrees of freedom and probability values for each of the predictor variables are shown in Table 33. None of the variables entered as predictor variables were significant predictors in either the step 1 or step 2 procedure.

Table 34
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of PTSD for Vignette B: Mean Symptom Ratings

Variable

Step 1	ß	*t*	*p*
Mean Sxs PTSD	.340	2.675	.009
Mean Sxs BPD	.030	0.238	.812
Sex of Client	.002	0.019	.985
Sex of Participant	.000	-0.005	.996

R = .363, R^2 = .132, Adjusted R^2 = .100

Step 2	ß	*t*	*p*
Mean Sxs PTSD	.217	1.584	.116
Mean Sxs BPD	-.253	-1.408	.162
Mean Sxs DESNOS	.426	2.206	.029
Sex of Client	.001	0.010	.992
Sex of Participant	-.008	-0.093	.926

R = .410, R^2 = .168, Adjusted R^2 = .131
Note. "Mean Sxs" = mean symptom ratings for this disorder.

A series of multiple regression analyses was conducted for Vignette B, with the dimensional diagnostic ratings for PTSD and then BPD as the criterion variables. Table 34 illustrates results for the first regression, with PTSD diagnostic ratings as the criterion. The first step included mean symptom ratings for PTSD and BPD, and the sex of client and sex of participants, as predictor variables. A second step added the mean symptom ratings for DESNOS. The first step model was significant in predicting the mean diagnostic ratings of PTSD, $F(4, 116) = 4.24$, $p = .003$. The PTSD mean symptom ratings were a significant predictor in this model, and were positively correlated with PTSD diagnostic ratings. When the DESNOS symptom ratings were added in the second step, PTSD symptom ratings were no longer significant. However, the overall two step model remained significant, $F(5, 116) = 4.25$, $p = .001$. In the second step, the DESNOS symptoms ratings were significant for predicting the diagnostic ratings of PTSD; higher DESNOS symptom ratings predicted higher PTSD diagnostic ratings. In both models, mean BPD symptoms, the sex of the client and sex of the participant were not significant predictors of PTSD diagnostic ratings.

Using the same predictor variables in two steps, a second regression was performed with BPD diagnostic ratings as the criterion variable (see Table 35). The first step model was significant for predicting the diagnostic ratings of BPD, $F(4, 115) = 4.75$, $p = .001$, as was the second step model, $F(5, 115) = 4.25$, $p = .001$. The mean symptom ratings for BPD and sex of the participants proved to be significant predictors in both models, with male sex predicting higher BPD diagnostic ratings. Sex of the client and PTSD symptom ratings were not significant in either model, and the DESNOS symptom ratings were not a significant predictor of BPD diagnostic ratings.

Table 35
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of BPD for Vignette B: Mean Symptom Ratings

Variable			
Step 1	ß	*t*	*p*
Mean Sxs PTSD	-.121	-0.957	.341
Mean Sxs BPD	.355	2.802	.006
Sex of Client	.103	1.171	.244
Sex of Participant	-.228	-2.587	.011

R = .382, R^2 = .146, Adjusted R^2 = .115

Step 2	ß	*t*	*p*
Mean Sxs PTSD	-.038	-0.275	.783
Mean Sxs BPD	.542	2.995	.003
Mean Sxs DESNOS	-.283	-1.443	.152
Sex of Client	.105	1.195	.235
Sex of Participant	-.224	-2.557	.012

R = .402 , R^2 = .162, Adjusted R^2 = .124
Note. "Mean Sxs" = mean symptom ratings for this disorder.

Another set of regressions was performed with the diagnostic ratings for PTSD and then BPD as the criterion variables using the number of symptoms rated as present for the target diagnoses as the predictor variables. Again, the first step included the sex of the client and sex of participants, number of PTSD and BPD symptoms, and the second step added the number of DESNOS symptoms. Table 36 displays results for diagnostic ratings for PTSD as the criterion variable. The first step model was significant, $F(4, 114) = 3.44$, $p = .011$, and the mean number of symptoms met for PTSD emerged as the only significant predictor of diagnostic ratings for

PTSD. The second step model remained significant overall, $F(5, 114) = 4.08$, $p = .002$. However, the number of PTSD symptoms was no longer significant, and the number of DESNOS symptoms was the only significant predictor.

Table 36
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of PTSD for Vignette B: Mean Number of Symptoms Rated as Present

Variable			
Step 1	ß	*t*	*p*
Sxs met PTSD	.280	2.651	.009
Sxs met BPD	.087	0.817	.415
Sex of Client	-.012	-0.137	.892
Sex of Participant	.001	0.015	.988

$R = .334$, $R^2 = .111$, Adjusted $R^2 = .079$.

Variable			
Step 2	ß	*t*	*p*
Sxs met PTSD	.167	1.480	.142
Sxs met BPD	-.116	-0.874	.384
Sxs met DESNOS	.351	2.448	.016
Sex of Client	-.014	-0.154	.878
Sex of Participant	.001	0.015	.988

$R = .397$, $R^2 = .158$, Adjusted $R^2 = .119$.
Note. "Sxs met" = the mean number of symptoms endorsed to meet criteria for the diagnosis. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on a 1-7 scale.

Using the same predictor variables in two steps, a regression analysis was performed with BPD diagnostic ratings as the criterion variable (see Table 37). The first step model was

significant for predicting the diagnostic ratings of BPD, $F(4, 113) = 4.19$, $p = .003$, and the second step model was also significant, $F(5, 113) = 3.67$, $p = .004$. The number of BPD symptoms met and sex of participants were significant predictors in both models, with male sex predicting higher BPD diagnostic ratings. None of the other variables proved significant predictors.

Table 37
Multiple Regression Analysis for Variables Predicting Dimensional Diagnostic Ratings of BPD for Vignette B: Mean Number of Symptoms Rated as Present

Variable

Step 2	ß	*t*	*p*
Sxs met PTSD	-.101	-0.965	.337
Sxs met BPD	.308	2.940	.004
Sex of Client	.109	1.207	.230
Sex of Participant	-.221	-2.472	.015

$R = .365$, $R^2 = .133$, Adjusted $R^2 = .102$.

Variable

Step 2	ß	*t*	*p*
Sxs met PTSD	-.043	-0.378	.706
Sxs met BPD	.412	3.052	.003
Sxs met DESNOS	-.179	-1.218	.226
Sex of Client	.109	1.217	.226
Sex of Participant	-.215	-2.402	.018

$R = .381$, $R^2 = .145$, Adjusted $R^2 = .106$.
Note. "Sxs met" = the mean number of symptoms endorsed to meet criteria for the diagnosis. Symptoms for each of the three target disorders were considered to be met if they were rated as 5.00 or higher on a 1-7 scale.

Order Effects

Chi-square analyses were used to examine the effect of case order (Vignette A or B first) and rating order (symptom ratings or diagnostic ratings first) on the primary diagnoses assigned to Vignettes A and B. For both vignettes, there was not a significant effect of case order or rating order on the primary diagnoses.

A series of two-way analyses of variance (ANOVA) was used to analyze main and interaction effects of case order and rating order on the diagnostic ratings for PTSD and BPD. For Vignette A, there was a main effect of case order on the PTSD diagnostic ratings, $F(1, 118) = 7.58$, $p = .007$ (partial eta squared = .062, medium effect size; see Table 38). When participants received Vignette A first, mean PTSD ratings were higher than when Vignette A was received second. There was not a significant effect of rating order, nor a significant interaction between case order and rating order, on the PTSD diagnostic ratings. There were no significant order effects for the BPD diagnostic ratings on Vignette A. For Vignette B, there were no significant order effects for either the PTSD or the BPD diagnostic ratings.

Table 38
Mean Diagnostic Ratings for PTSD According to Case Order for Vignette A

Vignette Order	*M*	*SD*	*N*
A, B	6.45	1.12	64
B, A	5.89	1.31	55

A series of two-way ANOVAs was also used to examine order effects on the mean symptom ratings for PTSD, BPD, and DESNOS. For Vignette A, there was a significant effect of case order on the mean PTSD symptom ratings, $F(1, 120) = 8.60$, $p = .004$ (partial eta squared = .069, medium effect size; see Table 39). Like the PTSD diagnostic ratings, mean symptom

ratings for PTSD were higher when Vignette A was presented first rather than second. There was not a significant effect of rating order, or interaction between case order and rating order, on the mean PTSD symptom ratings. There were no significant order effects on the mean symptom ratings for BPD or DESNOS for Vignette A. For Vignette B, there were no significant order effects on the mean symptom ratings for PTSD, BPD, or DESNOS.

Table 39
Mean Symptom Ratings for PTSD According to Case Order for Vignette A

Vignette Order	*M*	*SD*	*N*
A, B	5.35	.823	65
B, A	4.86	.992	56

.

Finally, a series of two-way ANOVAs was used to determine if there was any effect of case order or rating order on the number of symptoms rated as present for each of the three target diagnoses. For Vignette A, the findings for the number of PTSD symptoms paralleled those for the diagnostic ratings and the mean symptom ratings for PTSD; there was a main effect of order of the cases on number of PTSD symptoms rated as present, $F(1, 120) = 9.63$, $p = .002$ (partial eta squared = .076, medium effect size), with more PTSD symptoms rated as present when participants received Vignette A first (see Table 40). There was not a significant effect of rating order, nor a significant interaction between case order and rating order, on the number of PTSD

Table 40
Number of PTSD Symptoms Rated as Present According to Case Order for Vignette A

Vignette Order	*M*	*SD*	*N*
A, B	11.82	2.62	65
B, A	10.11	3.29	56

Note. Symptoms were considered to be rated as present if they were rated 5.00 or higher on the 7-point scale (1 = not at all descriptive, 7 = highly descriptive).

symptoms. No significant order effects were found for the number of BPD symptoms or number of DESNOS symptoms for Vignette A. For Vignette B, there were no significant order effects for the mean number of symptoms of PTSD, BPD, or DESNOS.

Participant Variables

A final series of analyses was performed to examine the effects of participant variables, including age and years of experience, on the dependent variables. Analyses were not performed for ethnicity, as there were too few participants in minority groups for meaningful comparisons, or for theoretical orientation, due to the likely confusion over the alignment of the response choices. Age of participants was categorized into four groups (i.e., <36, 36-45, 46-55, >55) as was years of experience (i.e., 0-10, 11-20, 21-30, >30).

Table 41
Differences in Mean Diagnostic Ratings for BPD for Vignette B, According to Participants' Years of Experience

Years of Experience	*M*	*SD*	*N*
0-10	2.81*	1.79	36
11-20	3.43	1.94	21
21-30	4.28	2.05	18
30+	4.46*	1.85	13

* The mean difference is significant at the 0.05 level.

A series of chi-square analyses examining the effect of participant age and participant experience on the primary diagnosis were all not significant for both vignettes. A series of separate one-way ANOVAs examining the effect of participant age and participant experience on the dimensional diagnostic ratings for PTSD and BPD, and the mean symptom ratings and number of symptoms met for PTSD, BPD and DESNOS, were also not significant for either

vignette with one exception. For Vignette B, a significant effect was found for years of experience for the BPD diagnostic ratings, $F(3, 87) = 3.77$, $p = .014$ (partial eta squared = .119, medium effect size). A Bonferroni *post-hoc* test revealed a significant difference between the mean diagnostic ratings of the group with the fewest years of experience, and the group with the most experience (see Table 41).

CHAPTER 4

DISCUSSION

Overview of Findings

The present study examined participants' diagnostic perceptions of two cases of Disorders of Extreme Stress, Not Otherwise Specified (DESNOS). The construct of DESNOS was proposed to better capture the symptoms of individuals who have experienced severe, recurrent childhood trauma than the current categories of PTSD and BPD. The first hypothesis, that DESNOS would receive higher mean symptom ratings than PTSD, BPD, or comorbid PTSD/BPD, was not supported. There were differences between the two case vignettes; PTSD and BPD each received higher mean symptom ratings than DESNOS in Vignette A, as did comorbid PTSD/BPD, but in Vignette B there were no significant differences between the symptom ratings for the three disorders. This pattern was replicated for the number of symptoms met for the disorders when controlling for differences in the number of possible symptoms (i.e., percent of possible symptoms).

The hypothesis that sex of the client would influence the primary diagnosis of BPD was not supported in Vignette A, but was supported in Vignette B, in which all cases of BPD diagnosed were for the female version of the case. The hypothesis that female participants would endorse higher PTSD diagnostic ratings than would male participants was not supported.

However, in a related finding, female participants endorsed more PTSD symptoms and assigned higher PTSD symptom ratings than did male participants, for Vignette A only.

Lastly, there were several interesting main and interaction effects for sex of the client and participant about which no specific hypotheses had been made. For Vignette B only, sex of the participant influenced BPD diagnostic ratings, with male participants assigning higher ratings overall than did female participants. For Vignette A only, male participants gave higher BPD diagnostic ratings when the client in the vignette was male, and female participants gave higher BPD diagnostic ratings when the client was female. The same pattern was found regarding the number of BPD symptoms met for Vignette A.

The following discussion addresses the findings for each of the hypotheses of the study within the context of the literature on DESNOS, BPD and PTSD, and clinical decision-making. This is followed by a discussion of the limitations of the present study. Finally, the implications of the findings and directions for future research are discussed.

DESNOS Versus PTSD and BPD

The primary purpose of the present study was to explore the usefulness of the construct of DESNOS (originally referred to as Complex PTSD). This diagnosis was proposed to encompass the complicated array of symptomatology seen in individuals who have survived intense and sustained childhood trauma that goes beyond the existing PTSD criteria (van der Kolk et al., 2005). Many of these additional symptoms (e.g., affect dysregulation; difficulty with anger; high risk, self harm and suicidal behaviors; disturbance in the sense of self and inconsistent sense of others; Ford & Kidd, 1998; Herman, 1992) have obvious overlap with BPD. In fact, many (but not all) individuals who have sustained such abuse may meet the criteria for BPD, or both DESNOS and BPD (McLean & Gallop, 2003). The goals of the DESNOS

diagnosis were to lessen the stigma these individuals encounter, to put the emphasis in treatment on their trauma, and to create one parsimonious diagnosis that would encompass many domains (McLean & Gallop, 2003; van der Kolk et al., 2005). However, the overlap of DESNOS with both PTSD and BPD prompted Kilpatrick (2005) to ask, "Is complex PTSD/DESNOS merely a proxy for comorbidity in general?" (p. 380).

If DESNOS is a more comprehensive and parsimonious description of the symptoms of individuals who have undergone severe and persistent childhood trauma than existing diagnoses, then DESNOS should be a better descriptor of their symptomatology than PTSD, BPD, or comorbid PTSD/BPD. Because DESNOS (or Complex PTSD) is not a diagnostic category in the DSM-IV, the present study assessed this proposal by examining symptom ratings for the cases, rather than diagnoses. The cases were taken from a training module on DESNOS developed by leading trauma researchers (Luxenberg et al., 2001) and were therefore considered to be representative of DESNOS.

In Vignette A, in which the PTSD and BPD symptoms were more pronounced (i.e., moderately high symptom ratings for all three constructs), the mean symptom ratings of PTSD and BPD, as well as comorbid PTSD/BPD, outperformed DESNOS. A similar pattern emerged for the number of symptoms rated as present in the case, when controlling for the number of possible symptoms associated with each diagnosis (i.e., percent of possible symptoms). Yet in Vignette B, in which the overall symptom picture was more ambiguous, there was no difference between the mean symptom ratings; the symptom sets of all three target disorders were rated similarly. Although the number of symptoms of DESNOS rated as present in Vignette B was higher than the number of BPD and PTSD symptoms, the number of symptoms of DESNOS and comorbid PTSD/BPD were very similar, and there were no significant differences between the

constructs using percent of possible symptoms. Overall, there was little support for the hypothesis that the constellation of symptoms represented by DESNOS would better describe the symptoms in these DESNOS cases than the existing categories singly or jointly; the symptomatology in the cases was described as well (or better for Vignette A) by PTSD, BPD, or comorbid PTSD/BPD.

Examination of the individual symptom ratings for the vignettes may shed some light on these findings. For Vignette A, 12 of the 16 PTSD symptoms, 4 of the 9 BPD symptoms, and 6 of the 25 DESNOS symptoms were rated high ($M \geq 5.00$). None of the PTSD or BPD symptoms, but 8 of the DESNOS symptoms, were rated low ($M \leq 3.00$). The DESNOS symptoms rated as not very representative of the case included a variety of somatic symptoms, conversion symptoms, sexual symptoms, and amnesia (which was also the lowest rated symptom of PTSD). For Vignette B, the symptom picture was less clear. Only one PTSD and one BPD symptom were rated high, whereas four PTSD symptoms and two BPD symptoms were rated low. Although four DESNOS symptoms were rated high, another six symptoms received low mean ratings. Like Vignette A, the DESNOS symptoms rated as not very representative of Vignette B included some of the somatic symptoms, sexual symptoms, and amnesia. Thus, a number of the symptoms included in the DESNOS construct were not relevant for the patients in the two vignettes, lowering the mean symptom ratings and percent of possible symptoms of DESNOS present in the case. Although no patients, even prototypic patients, would be expected to demonstrate all of the symptoms of a diagnosis (e.g., Blashfield, Sprock, Haymaker & Hodgin, 1989), these results suggest that the DESNOS criteria may be too broad. Perhaps more problematic for the construct is that the symptoms that overlap with PTSD and BPD were rated highest, whereas the additional dissociative, somatic, and sexual symptoms in DESNOS were

rated as least representative for both cases. Although these findings may be a function of the particular cases used in this study, they further support the conclusion that the symptoms demonstrated by these patients are adequately covered by the existing categories.

A secondary goal in the proposal of the DESNOS diagnosis was to lessen the stigma associated with BPD. This encompassed the conceptualization of the clients' difficulties as stemming from environmental rather than intrapsychic factors (Herman, 1992). This shift in thinking regarding the etiology of symptoms was proposed to offer hope that clinicians might experience less toxic countertransferential reactions toward such patients, once they conceived of their difficulties as stemming from trauma rather than being inherent traits. However, the proponents of DESNOS (Herman, 1992; van der Kolk, et al., 2005) did not address how stigma toward individuals diagnosed with DESNOS might develop if the diagnosis were incorporated into DSM. The clients DESNOS describes would remain as difficult to work with under the alternate moniker as they had been under the BPD label. Adopting a new diagnostic category with hopes of reducing stigma does not change the dynamic of working with individuals who are angry, aggressive, demanding of high levels of care, and engaged in high-risk behaviors such as self-harm, suicidality, and substance abuse. One can imagine a scenario in which the DESNOS label would in time become as tinged with negative connotations as the BPD diagnosis, since clinicians' countertransferential reactions toward such clients are unlikely to be altered by the change in diagnostic label alone.

Nonetheless, reducing the stigma of BPD is still a worthy endeavor, and one that is perhaps happening to some extent currently with the work of Linehan (1993) and the widespread implementation of Dialectical Behavior Therapy. Linehan's biopsychosocial theory of BPD emphasizes the interaction between biologically driven predisposing factors (deficits in the affect

regulatory system) and the environment, including childhood trauma. The adoption of this model might be influential in changing clinicians' attitudes toward those affected by early trauma who present with BPD-like symptoms.

That such attitude change is possible was demonstrated by Krawitz (2004) who created a two day workshop for clinicians focusing specifically on changing perceptions about BPD. Krawitz educated clinicians on the etiology of BPD (including Linehan's model), and also emphasized the literature that suggests treatment for BPD is effective. Krawitz saw a reduction in clinicians' negative attitudes toward BPD clients, and an increased desire to work with them. In the present study, the criteria for DESNOS did not outperform those of the existing categories of PTSD and BPD. In light of this, training on attitude change and continued emphasis on understanding the role of trauma in the etiology of BPD symptoms might be a viable means of reducing stigma and improving the clinical outcomes of traumatized individuals.

Diagnoses and diagnostic dimensional ratings. Although the present study was unable to assess clinicians' use of DESNOS as a diagnosis because it is not part of the current nomenclature, the PTSD and BPD diagnoses and dimensional ratings assigned to the cases can also help elucidate the findings. For both vignettes, it was clear that the majority of participants conceptualized each case as reflecting a client with PTSD, since the diagnostic ratings were highest for PTSD in both vignettes, and the most frequent primary diagnosis assigned for both cases was PTSD. This was more pronounced for Vignette B, in which there was less variation in primary diagnosis; over 67% of participants assigned PTSD as the primary diagnosis. In Vignette A, there was a much larger percentage of clinicians who saw the case as indicative of BPD, whereas Vignette B received a very small number of BPD diagnoses. Dimensional diagnostic

ratings for BPD were moderately high for Vignette A but moderately low for Vignette B. These differences may be explained by differences in the specific symptoms in the two cases.

An early study on clinical decision-making conducted by Morey and Ochoa (1989) demonstrated that clinicians do not conform closely to the diagnostic criteria when assigning a personality disorder diagnosis. Of particular relevance to the present study, they found that the most prototypical feature of BPD was “suicidal threats and self-harm gestures,” a feature clinicians regarded as "necessary and sufficient" for a diagnosis of BPD (p. 187). They found that BPD was over-diagnosed if this feature was present in a case, and under-diagnosed if it was absent. They also noted that the clinicians weighted the diagnostic criteria differently, not in an additive fashion as specified in the diagnostic manual. In a replication study, Blashfield and Herkov (1996) also found evidence that clinicians do not adhere to the diagnostic criteria, and that the feature “recurrent suicidal gestures” was predictive of over-diagnosis of BPD and its absence was predictive of under-diagnosis of BPD.

Using a different methodology to investigate the diagnosis of PTSD, McFall, Murburg, Smith, and Jensen (1991) asked clinicians to rate the level of importance of the PTSD criteria for diagnosing PTSD in combat veterans. Two criteria, exposure to a life-threatening event and re-experiencing symptoms, were weighted far more heavily than symptoms from the other symptom clusters (i.e., avoidance symptoms and increased physiological arousal symptoms).

The above findings could help provide an explanation for some of the differences found between the two vignettes in the present study. Vignette A describes several suicide attempts and self-injurious behaviors in the first paragraph, followed by a clear-cut description of flashbacks to severe childhood trauma in the second paragraph. As expected, although most participants diagnosed PTSD, BPD was also diagnosed in a third of the cases, and both PTSD and BPD

diagnostic dimensions were rated at least moderately high. Conversely, in Vignette B, no self-injurious or suicidal behaviors were presented, very few BPD diagnoses were assigned, and BPD diagnostic ratings were moderately low. The absence of the cardinal features of BPD resulted in the majority of participants assigning a diagnosis of PTSD, even though the PTSD symptoms were rated lower for this case than Vignette A. This might have been because the case did not include flashbacks, the cardinal feature of PTSD identified by McFall et al. (1991). It seems the feature of Vignette B participants found most salient was the history of severe childhood sexual abuse.

The results of multivariate analyses also provide information about the decision-making processes of the clinicians in this study. Unlike Morey and Ochoa (1989) and Blashfield and Herkov (1996), there was some consistency between participants' symptom ratings for the cases, the categorical diagnoses, and diagnostic ratings assigned. The PTSD and BPD symptom ratings (mean symptom ratings, and number of symptoms in the case) generally proved to be significant predictors of a diagnosis of PTSD versus BPD or other diagnosis, and of the diagnostic ratings of PTSD and BPD for the cases. Blashfield et al. (1989) found that the number of features of a personality disorder in a case were predictive of that diagnosis, although the correlation was far from perfect, which could have been due to the differential weighting of features (i.e., McFall et al., 1991; Morey & Ochoa, 1989).

The multivariate analyses also provide some information about the predictive value of the DESNOS symptoms. The addition of the DESNOS symptoms in the second step of the regressions affected the predictive value of the symptoms for the primary categorical diagnosis for Vignette B, and for the PTSD and BPD diagnostic ratings for both vignettes. For Vignette A, the DESNOS symptoms were not a significant predictor of the primary diagnosis. However, for

the PTSD diagnostic ratings, the mean BPD symptom ratings were no longer a significant (inverse) predictor when the mean DESNOS symptom ratings were included, suggesting shared variance between the DESNOS and BPD symptoms. In addition, the mean DESNOS symptom ratings were a significant predictor of the BPD diagnostic ratings.

For Vignette B, the PTSD mean symptom ratings were no longer a significant predictor of the primary diagnosis after the DESNOS symptom ratings were added, suggesting the DESNOS symptoms shared some of the variance with PTSD symptoms. For the PTSD diagnostic ratings for Vignette B, the mean PTSD symptoms and the number of PTSD symptoms were no longer significant predictors when the DESNOS symptoms were included. Instead, the mean DESNOS symptom ratings and number of DESNOS symptoms were significant predictors, with higher DESNOS symptom ratings predicting higher PTSD diagnostic ratings. These results suggest that the DESNOS criteria are sharing some of the variance with the PTSD criteria.

Although the DESNOS criteria did not perform as well as the PTSD and BPD criteria in describing these cases, the multivariate analyses demonstrate that they did contribute to the prediction of the primary diagnosis and the dimensional diagnostic ratings. This may be partly explained by the overlap in symptoms of DESNOS with those of BPD and PTSD. Nonetheless, the DESNOS criteria set also consists of unique items along with overlapping items that seem to have been influential in both the PTSD and BPD diagnoses and dimensional ratings. The fact that the DESNOS symptom ratings, both mean ratings and number of symptoms, were significant predictors of PTSD diagnostic ratings for Vignette B suggests that clinicians are aware of the broad constellation of symptoms that are associated with PTSD. Although there is no category of DESNOS (or Complex PTSD) in the DSM-IV, these additional features are described in the DSM-IV text as associated features of PTSD.

Sex of the Client and Sex of the Participant

Borderline personality disorder. The hypothesized sex difference in BPD diagnosis was not observed for Vignette A, but was found for Vignette B; all of the diagnoses of BPD for Vignette B were assigned to the female version of the case. Several studies in the literature on sex bias in personality diagnosis may contribute to the understanding of this finding. Henry and Cohen (1983) studied clinicians' diagnostic decision-making, and found support for their contention that clinicians use "labeling processes" when making diagnoses. They suggested such processes are not based on the observed behavior of the client so much as on social constructivism. They found, in a non-clinical sample of men and women, that the men demonstrated more BPD characteristics than did the women. This difference in actual symptoms was not reflected in the diagnoses made by the clinician participants in their study, however, as men and women were diagnosed with BPD at equivalent rates, rather than the men receiving higher rates of diagnosis. Henry and Cohen explained this effect as indicative of expectations of clinicians based on prevalence rates as well as on expected behaviors of men and women according to gender roles. What the authors of this study surmised from their data overall was that labeling processes (i.e., bias) may be more pronounced when the diagnostic picture is more indistinct, a finding in keeping with some of the literature previously reviewed (Becker & Lamb, 1994). In relation to the present study, this suggests that the ambiguity inherent in Vignette B may have contributed to the sex difference emerging for this case, but not for Vignette A. This ambiguity is evidenced by more moderate symptom ratings for all three target diagnoses, as well as participants' lower ratings of confidence in their diagnoses for Vignette B.

Another possible explanation may be found by again comparing the specific symptom presentations in the two cases. Vignette B presents a client who is not only volatile but violent;

outbursts of aggression and chronic anger are featured prominently in the vignette. The client in Vignette A, although described as having problematic relationships that suggest volatility, is not described as violent. An incident of lashing out and punching someone is described in Vignette A, but this is presented to support an exaggerated startle reflex, a PTSD symptom, rather than volitional aggression. Examination of the mean symptom ratings for each vignette (see Appendixes L and N) indicates that the participants did, in fact, appreciate this difference between the two vignettes; the symptoms rated most highly for Vignette B for each of the target disorders were the symptoms related to anger.

Recall that the study by Sprock, Blashfield, and Smith (1990) had demonstrated that intense anger was perceived as a masculine feature. Sprock (1996) suggested that when anger was a prominent feature in women, this was perceived as more maladaptive than when anger was attributed to men. She hypothesized that angry and aggressive behaviors in women may be viewed as inconsistent with expected sex roles, and therefore pathologized. Women may be more frequently diagnosed with BPD when intense anger is a prominent characteristic due to this difference in expected sex roles. This conclusion is in keeping with several studies previously discussed that have suggested that sex roles provide a context in which diagnostic decision-making takes place (Flanagan & Blashfield, 2003; Flanagan & Blashfield, 2005). That only females were diagnosed with BPD for Vignette B is also in keeping with Becker and Lamb's (1994) findings that traumatized women maybe more likely to receive a BPD diagnosis than traumatized men.

It should be noted that although this result was statistically significant, and the sex bias it suggests is intriguing, the fact remains that only 8 out of 120 participants diagnosed BPD for Vignette B. This result must be put into context, in terms of its limited clinical significance; it

was far more likely that this case had been diagnosed with PTSD and not BPD. This begs the question, why was BPD a much less frequent diagnosis for Vignette B than for Vignette A? As suggested earlier, it may be that the absence of self-harm and suicidality acted as an exclusion rule (i.e., Blashfield & Herkov, 1996; Morey & Ochoa, 1989), and played a role in the infrequency of BPD diagnoses overall for Vignette B.

The effects of participant sex and interaction effects found concerning the BPD diagnoses were not hypothesized, but are interesting to explore. For Vignette B, male participants endorsed higher BPD diagnostic ratings overall than did female participants. In fact, male participant sex emerged in the multiple regression analyses as a significant predictor of higher BPD diagnostic ratings. The literature has yielded inconsistent results with respect to the effect of clinician gender on the diagnosis of BPD. Although Morey and Ochoa (1989) found that female clinicians over-diagnosed BPD compared to their ratings of the symptoms in the case, Blashfield and Herkov (1996) failed to find a significant effect of clinician sex on the over-diagnosis or under-diagnosis of BPD. In contrast, in Vignette A an interaction effect was observed, with male participants giving higher BPD ratings when the client in the vignette was male, and female clinicians giving higher ratings when the client was female. This same pattern emerged for the number of BPD symptoms met in Vignette A.

In a study of undergraduate students, Klonsky, Jane, Turkheimer, and Oltmanns (2002) demonstrated that individuals who rated themselves as conforming less to their gender role (i.e., women who felt they were less feminine, and men who felt they were less masculine) also endorsed higher ratings of BPD in describing themselves. These authors concurred with previous research (Landrine, 1989; Rienzi, Forquera, & Hitchcock, 1995; Sprock et al., 1990; Sprock, 1996) in suggesting that nonconformity with expected sex roles may augment the perception of

psychopathology. Other authors, however, have suggested that it is not inconsistency with sex roles, but extremes of sex-typed behaviors that are seen as more pathological (Corbitt & Widiger, 1995; Morey, Warner & Boggs, 2002). In Vignette A, behaviors are present that may be interpreted through either of these viewpoints. The client in the vignette displays a range of behaviors that may be perceived as extreme or as inconsistent with gender roles for either sex (or a combination thereof). For example, self-harm and disordered eating may be more associated with women, whereas a history of substance abuse may be more associated with men. It is not known in the present study if it was severity of the symptoms or inconsistency with gender roles that influenced these findings. However, that the participants perceived the client of their own gender as having more BPD traits, and also rated these traits as more severe, suggests they were interpreting the client's behavior within the context of gender. Again, there were different patterns here for each vignette; no such interaction was found for Vignette B, which may be explained by the less severe symptom presentation.

That individuals might interpret extremes of their own gender's stereotypical behavior as more pathological may also explain why male participants assigned higher BPD diagnostic ratings for Vignette B than did female participants. As discussed, Sprock et al. (1990) demonstrated that angry and aggressive behavior is viewed as consistent with a masculine prototype. Since this feature was so much more pronounced in Vignette B, it could be that male participants identified this particular feature as even more maladaptive then did female participants, and therefore assigned this case higher BPD ratings.

Posttraumatic stress disorder. The hypothesis that female participants would give higher diagnostic ratings for PTSD than would male participants was not supported. No effect for sex was found in the primary diagnosis or the diagnostic ratings for PTSD, in contrast to the findings

of Becker and Lamb (1994). Yet, in Vignette A, women participants did assign higher symptom ratings to PTSD than did male participants, and they also endorsed more of the PTSD symptoms overall than did their male counterparts. This seems to reflect that the female participants were attending more to trauma than were the men, and provides some support for Becker and Lamb's (1994) finding than women clinicians are more sensitive to trauma. However, this finding was a subtle effect only measurable when the numerous symptoms of PTSD (16 in all) were examined, as opposed to the single diagnostic rating. Therefore, it is important to question the clinical significance of this result; if male and female clinicians are assigning a diagnosis of PTSD at equivalent rates, and are assigning similar ratings to PTSD dimensionally, would these subtle differences in perceptions of PTSD symptoms have much impact on the treatment such clinicians would provide? Moreover, this finding applied only to Vignette A; in Vignette B, there was no effect for participant sex on the PTSD symptom ratings or number of symptoms met. Again, severity of symptoms might account for this difference. Although PTSD was diagnosed more frequently for Vignette B, the symptom ratings were lower for all three diagnostic constructs, including PTSD, and the vignette lacked the cardinal symptom of PTSD (i.e., flashbacks) identified by McFall et al. (1991).

Other Participant Variables

No specific hypotheses were offered regarding participant variables, other than those for sex of the participant described above. Indeed, other participant characteristics were found to have little impact on the dependent variables. Participants' age and years of experience had little effect on the diagnoses and ratings of the vignettes. The one exception was the effect of years of experience on the diagnostic ratings of BPD for Vignette B, in which the group with the most years of experience (>30) was found to have assigned significantly higher ratings than did the

group with the fewest years of experience (<10). This may be explained by the lack of cardinal BPD features (i.e., self-harm and suicidality) in Vignette B. The borderline traits that were present were more subtle, and were perhaps observed more readily by the more experienced clinicians. Another potential explanation for the effect of years of experience could be that clinicians with 30 or more years of experience would have been trained using an earlier version of the diagnostic manual.

Morey and Ochoa (1989) found that years experience was a significant predictor of over- and under-diagnosis of BPD, with more experienced clinicians over-diagnosing BPD; however, this finding was not replicated in Blashfield and Herkov's (1996) study. Morey and Ochoa also found that a psychodynamic orientation predicted over-diagnosis of BPD, a finding that was partly supported by Blashfield and Herkov. Returning to the present study, clinicians with more than 30 years experience would have been trained prior to the publication of the DSM-III in 1980. The DSM-III introduced a significant shift in the nomenclature from the psychodynamic conceptualizations of disorders in the DSM-II (APA, 1968), to a descriptive and (purportedly) atheoretical approach in which diagnosis is based on observation and diagnostic reliability is emphasized (Blashfield, 1984; Nathan & Langenbucher, 1999). Whether the clinicians with at least 30 years of experience were more influenced by a dynamic conceptualization of the case than by the observed symptoms is unknown. Unfortunately, the problem with the formatting of the theoretical orientation item did not allow for examination of the possibility that differences in theoretical orientation accounted for the differences based on years of experience.

Order Effects

There were no effects of the order in which the participants completed the diagnostic ratings and symptom ratings (i.e., assigning a diagnosis and diagnostic ratings before or after the

symptom ratings). However, there was a significant effect of case order on the PTSD symptom ratings for Vignette A. When Vignette B was presented first, the PTSD ratings for Vignette A were lower than when Vignette A was presented first. This was true for the diagnostic ratings, mean symptom ratings, and number of symptoms met. This suggests that the nebulous qualities of Vignette B (i.e., lower ratings for symptoms from all three constructs but higher percent of PTSD diagnoses) may have influenced the clinicians' perceptions of Vignette A, decreasing their ratings of the PTSD symptoms.

Limitations and Strengths

The present study is an analogue study using vignettes to represent clinical cases. There are inherent limitations to this design. Namely, it is not known if the way the clinician participants responded to the vignettes would translate to their diagnostic decision-making if they were interviewing real clients. The clients represented in the vignettes demonstrated complicated symptomatology. Clinicians in vivo can gather additional data, ask follow-up questions, and further elucidate their clinical impressions, which of course cannot happen when using vignette methodologies. The participants in this study were challenged to consider only the information provided in forming diagnostic impressions. Nonetheless, there is a large body of literature utilizing this methodology in social science research (e.g., Becker & Lamb, 1994; Crosby & Sprock, 2004; Flanagan & Blashfield, 2005; Mendelsohn & Sewell, 2004). Such studies illuminate decision-making processes in diagnosis and can point the way for follow-up studies that might utilize real patients in their design. The present study adds to this body of literature, since it is the first such study to compare the DESNOS criteria with the PTSD and BPD criteria to examine clinicians' diagnostic perceptions.

Moreover, the present study used vignettes that were taken from a training module on DESNOS developed by leading trauma researchers (Luxenberg et al., 2001). The vignettes were developed from case material of patients with Complex PTSD symptoms, and were viewed to be comprehensive examples of the construct. Thus, the vignettes are considered to be excellent examples of cases of DESNOS. However, one potential limitation was that the vignettes were edited for length for the present study, which may have affected the results by eliminating potentially informative case material.

Another limitation was the relatively low response rate of just over 10%. Although the response rate of the present study was on par with studies of similar design (e.g., Crosby & Sprock, 2004), the results from a relatively small self-selected sample of psychologists might not be generalizeable to the population of American psychologists as a whole. However, in a study of self-selected clinicians used as participants in a clinician vignette study, Blashfield and McElroy (1989) found no evidence for self-selection bias. The authors concluded that it is reasonable for researchers to generalize from a self-selected sample to the broader population of psychologists in studies using vignette methodology, provided that participant variables are taken into account. In the present study, aside from participant sex, participant variables were found to have negligible effects on the dependent variables. Another consideration, however, was the problem in alignment of the response choices for the items for participant ethnicity and theoretical orientation, which prohibited the analysis of these variables.

The most significant limitation of this study was the fact that there is no DESNOS or Complex PTSD diagnosis in the DSM-IV with which to compare diagnoses of PTSD and BPD. As a result, symptom ratings and number of symptoms met had to be used as a proxy for the diagnosis itself. This posed some challenges. The clinician participants are obviously familiar

with the symptom sets for PTSD and BPD, whereas the DESNOS symptoms would have been unfamiliar. This might have affected their endorsement of the DESNOS symptoms in describing the vignettes. For example, it is possible that the participants came to a diagnostic conclusion fairly early in the vignette, which then influenced their symptom ratings as well as their diagnoses for the case. It is possible that the DESNOS symptoms were interpreted by participants as symptoms from other disorders (e.g., somatoform, dissociative, or mood disorders), which may have influenced their ratings of these symptoms.

Conclusions and Implications

The present study found that the DESNOS criteria did not perform as well as the PTSD and BPD criteria when the case material was severe and included cardinal features of these disorders. The DESNOS criteria performed on par with PTSD and BPD in a more ambiguous case with more diffuse symptomatology. The DESNOS criteria did capture some of the BPD features of the case better than did a diagnosis of PTSD alone. Thus, this study demonstrated some support for DESNOS, but not strong support. Further evidence of the construct validity of DESNOS would be warranted for its inclusion in the upcoming DSM-V.

The most encouraging finding of this study was that both male and female clinicians attended to trauma, and overall, most assigned a PTSD diagnosis for the two cases regardless of gender. The red flag of self-harm and suicidality did influence a third of the clinicians to assign BPD as the primary diagnosis for Vignette A. Results of this study were consistent with previous findings that self-harm seems to be a particularly powerful feature in eliciting a BPD diagnosis, and trauma history and re-experiencing powerful features eliciting a PTSD diagnosis, as previous research has suggested. Still, multivariate analyses demonstrated that the clinicians did attend to the DSM-IV criteria despite their being influenced by cardinal features.

The issue of sex bias in the BPD diagnosis remains a salient one. Although the number of BPD diagnoses made for Vignette B was small, it is still striking that only female clients were given this diagnosis. Likewise, the interaction between client sex and participant sex in the ratings of BPD in Vignette A suggests that the context of gender remains influential. This study did not ask participants to discuss treatment planning, but one wonders how the differences in conceptualization (PTSD versus BPD) in these cases would impact the care such clients would receive. One of the goals of introducing the DESNOS diagnosis was specifically to reduce the stigma associated with receiving a diagnosis of BPD; results of the present study suggest that such stigma is likely to be the burden of more traumatized women than traumatized men, although this may depend on the sex of the clinician.

Future research should investigate whether a diagnosis of DESNOS has validity as a unitary construct, or whether it is perceived by clinicians as merely a sum of its parts. Studies that evaluate the factor structure of the DESNOS diagnosis may help to explore whether DESNOS is a distinct construct composed of identifiable factors, or if it is in fact a hybrid of two or more disorders. If it were demonstrated that the latter were true, it may be that the existing disorders are already well-researched and have demonstrated construct validity, which would make using the DESNOS label superfluous. However, if the former were shown to be true, and DESNOS is shown to have a factor structure that offers something distinct beyond existing diagnoses, this could be of benefit in providing more comprehensive evaluation and treatment for traumatized individuals.

REFERENCES

Ackerman, P., Newton, J., McPherson, W., Jones, J.G., Dykman, R. (1998). Prevalence of posttraumatic stress disorder and other psychiatric diagnoses in three groups of abused children (sexual, physical, and both). *Child Abuse and Neglect, 22,* 759-774.

Anderson, K., Sankis, L., & Widiger, T. (2001). Pathology versus statistical infrequency: Potential sources of gender bias in personality disorder criteria. *The Journal of Nervous and Mental Disease, 189* (10), 661-668.

American Psychiatric Association (1968). *Diagnostic and statistical manual of mental disorders*, (2nd ed.). Washington, DC: Author.

American Psychiatric Association (1987). *Diagnostic and statistical manual of mental disorders*, (3rd ed.). Washington, DC: Author.

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders*, (4th ed.). Washington, DC: Author.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders*, (4th ed.). Text Revision. Washington, DC: Author.

American Psychological Association (2005). Demographic characteristics of APA members by membership status. Retrieved November 18, 2006, from http://research.apa.org/member.html

Barnard, C.P., & Hirsh, C. (1985). Borderline personality and victims of incest. *Psychological Reports, 57,* 715-718.

Battle, C., Shea, M.T., Johnson, D., Yen, S., Zlotnick, C., & Zanarini, M. (2004). Childhood maltreatment associated with adult personality disorders: Findings

from the collaborative longitudinal personality disorders study. *Journal of Personality Disorders, 18* (2), 193-211.

Beck, A.T., & Freeman, A.E. (1990). *Cognitive therapy of personality disorders.* New York: The Guilford Press.

Becker, D. (2000). When she was bad: Borderline personality disorder in a posttraumatic age. *American Journal of Orthopsychiatry, 70* (4), 422-432.

Becker, D., & Lamb, S. (1994). Sex bias in the diagnosis of borderline personality disorder and posttraumatic stress disorder. *Professional Psychology: Research and Practice, 25* (1), 55-61.

Bem, S. L. (1981). *Bem Sex-Role Inventory Manual*. Palo-Alto, CA: Consulting Psychologists Press.

Blashfield, R.K. (1984). *The classification of psychopathology*. New York: Plenum Press.

Blashfield, R.K., & Herkov, M.J. (1996). Investigating clinician adherence to diagnosis by criteria: A replication of Morey and Ochoa (1989). *Journal of Personality Disorders, 10* (3), 219-228.

Blashfield, R.K., & McElroy, R. (1989). A benchmark analysis for personality disorders research: Studies using clinicians. *Journal of Personality Disorders, 3* (3), 174-179.

Blashfield, R.K., Sprock, J., Haymaker, D. & Hodgin, J. (1989). The family resemblance hypothesis applied to psychiatric classification. *Journal of Nervous and Mental Disease, 177,* 492-497.

Blashfield, R.K., Sprock, J., Pinkston, K., & Hodgin, J. (1985). Exemplar prototypes of personality disorder diagnoses. *Comprehensive Psychiatry, 26*, 11-21.

Cohen, J. (1992). Things I have learned (so far). In A. Kazdin (Ed.), *Methodological issues & strategies in clinical research* (pp. 315-333). Washington, DC: American Psychological Association.

Corbitt, E., & Widiger, T.A. (1995). Sex differences among the personality disorders: An exploration of the data. *Clinical Psychology: Science and Practice, 2* (3), 225-238.

Courtois, C.A. (1988). Healing the incest wound: Adult survivors in therapy. New York: Norton.

Crosby, J., & Sprock, J. (2004). Effect of patient sex, clinician sex, and sex role on the diagnosis of antisocial personality disorder: Models of underpathologizing and overpathologizing biases. *Journal of Clinical Psychology, 60* (6), 583-604.

Cusack, K., Falsetti, S., & Arellano, M. (2002). Gender considerations in the psychometric assessment of PTSD. In R. Kimmerling, P. Ouimette, & J. Wolfe (Eds.), *Gender and PTSD* (pp. 150-176). New York: The Guilford Press.

Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin, 116,* 429-456.

Flanagan, E., & Blashfield, R. (2003). Gender bias in the diagnosis of personality disorders: The role of base rates and social stereotypes. *Journal of Personality Disorders, 17* (5), 431-446.

Flanagan, E., & Blashfield, R. (2005). Gender acts as a context for interpreting diagnostic criteria. *Journal of Clinical Psychology, 61* (12), 1485-1498.

Foa, E., Ehlers, A., Clark, D., Tolin, D., & Orsillo, S. (1999). The posttraumatic cognitions inventory (PTCI): Development and validity. *Psychological*

Assessment, 11 (3), 303-314.

Ford, J. (1999). Disorders of extreme stress following war zone military trauma: Associated features of posttraumatic stress disorder (PTSD) or comorbid but distinct syndromes? *Journal of Consulting and Clinical Psychology, 67* (1), 3-12.

Ford, J., & Kidd, P. (1998). Early childhood trauma and disorders of extreme stress as predictors of treatment outcome with chronic posttraumatic stress disorder. *Journal of Traumatic Stress, 11* (4), 743-761.

Ford, M.R., & Widiger, T.A. (1989). Sex bias in the diagnosis of histrionic and antisocial personality disorders. *Journal of Consulting and Clinical Psychology, 57*, 301–305.

Garb, H. (1997). Race bias, social class bias, and gender bias in clinical judgment. *Clinical Psychology: Science and Practice, 4,* 99-120.

Gavranidou, M., & Rosner, R. (2003). The weaker sex? Gender and posttraumatic stress disorder. *Depression and Anxiety, 17,* 130-139.

Golier, J.A., Yehuda, R., Bierer, L.M., Mitropoulou, V., New, A.S., Schmeidler, J., et al. (2003). The relationship of borderline personality disorder to posttraumatic stress disorder and traumatic events. *American Journal of Psychiatry, 160* (11), 2018-2024.

Grayson, D., O'Toole, B., Marshall. R., Schureck, R., Dobson, M., Ffrench, M., et al. (1996). Interviewer effects of epidemiologic diagnoses of posttraumatic stress disorder. *American Journal of Epidemiology, 144,* 589-597.

Gunderson, J.G., & Sabo, A.N. (1993). The phenomenological and conceptual interface between borderline personality disorder and PTSD. *American Journal of Psychiatry, 150* (1), 19-27.

Henry, K.A., & Cohen, C.I. (1983). The role of labeling processes in diagnosing borderline personality disorder. *American Journal of Psychiatry, 140,* 11, 1527-1529.

Herman, J.L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress, 5* (3), 377-391.

Herman, J.L., Perry, J.C., & van der Kolk, B.A. (1989). Childhood trauma in borderline personality disorder. *American Journal of Psychiatry, 146* (4), 490-495.

Hodges, S. (2003). Borderline personality disorder and posstraumatic stress disorder: Time for integration? *Journal of Counseling and Development, 81,* 409-417.

Hyler, L., Woods, M., & Boudewyns, P. (1991). A three tier evaluation of PTSD among Vietnam combat veterans. *Journal of Traumatic Stress, 4,* 165-194.

Kaplan, M. (1983). A woman's view of DSM-III. *American Psychologist, 38,* 786-792.

Kessler, R., Sonnega, A., Brommet, E., Hughes, M., & Nelson, C. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry, 52,*1048-1060.

Kilpatrick, D. (2005). A special section on complex trauma and a few thoughts about the need for more rigorous research on treatment efficacy, effectiveness, and safety. *Journal of Traumatic Stress, 18,* 5, 379-384.

Klonsky, E.D., Jane, J.S., Turkheimer, E., and Oltmanns, T.F. (2002). Gender role and personality disorders. *Journal of Personality Disorders, 16* (5), 464-476.

Krawitz, R. (2004). Borderline personality disorder: Attitudinal change following training. *Australian and New Zealand Journal of Psychiatry, 38,* (7), 554 - 559.

Landrine, H. (1989). The politics of personality disorder. *Psychology of Women*

Quarterly, 13, 325-339.

Lenzenweger, M. & Cicchetti, D. (2005). Toward a developmental psychopathology approach to borderline personality disorder. *Development and Psychopathology, 17* (4), 893-898.

Linehan, M.M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.

Luxenberg, T., Spinazzola, J., Hidalgo, J., Hunt, C., & van der Kolk, B. (2001). *Complex trauma and disorders of extreme stress (DESNOS) diagnosis, part two: Treatment* [Continuing education training module]. (Directions in Psychiatry, Vol. 21, Lesson 26, Available from The Hatherleigh Company, Ltd. Available http: www.hatherleigh.com).

McFall, M. E., Murburg, M. M., Smith, D. E., & Jensen, C. F. (1991). An analysis of criteria used by VA clinicians to diagnose combat-related PTSD. *Journal of Traumatic Stress, 4,* 123–136.

McLean, L.M. (2004). Childhood sexual abuse and adult psychiatric diagnosis: Current views and clinical implications. *Psychiatry, 15* (2), 29-34.

McLean, L.M., & Gallop, R. (2003). Implications of childhood sexual abuse for adult personality disorder and complex posttraumatic stress disorder. *American Journal of Psychiatry, 160* (2), 369-371.

McGlashan, T.H., Grilo, C.M., Skodol, A.E., Gunderson, J.G., Shea, M.T., Morey, L.C., et al. (2000). The collaborative longitudinal personality disorders study: Baseline axis I/II and II/II diagnostic co-occurrence. *Acta Psychiatrica Scandanavica, 102*, 256-264.

Mendelsohn, M., & Sewell, K. (2004). Social attitudes toward traumatized men and women: A vignette study. *Journal of Traumatic Stress, 17* (2), 103-111.

Molnar, B., Buka, S., & Kessler, R. (2001). Child sexual abuse and subsequent psychopathology: Results from the National Comorbidity Survey. *American Journal of Public Health, 91,* 743-760.

Morey, L.C., & Ochoa, E.S. (1989). An investigation of adherence to diagnostic criteria: Clinical diagnosis of the DSM-III personality disorders. *Journal of Personality Disorders, 3*(3), 180-192.

Morey, L., Warner, M. & Boggs, C. (2002). Gender bias in the personality disorders criteria: An investigation of five bias indicators. *Journal of Psychopathology and Behavioral Assessment, 24* (1), 55-65.

Nathan, P.E. & Langenbucher, J.W. (1999). Psychopathology: Description and classification. *Annual Review of Psychology, 50,* 79-107.

Norris, F., Foster, J., & Weisshaar, D. (2002). The epidemiology of sex differences in PTSD across developmental, societal, and research contexts. In R. Kimmerling, P. Ouimette, & J. Wolfe (Eds.), *Gender and PTSD* (pp. 3-42). New York: The Guilford Press.

Ogata, S.N., Silk, K.R., Goodrich, S., Lohr, N.E., Westen, D., & Hill, E.M. (1990). Childhood sexual and physical abuse in adult patients with borderline personality disorder. *American Journal of Psychiatry, 147* (8), 1008-1013.

Paris, J. (2001). Psychosocial adversity. In W.J. Livesly (Ed.), *Handbook of personality disorders* (pp. 231-241). New York: Guilford Press.

Peters, L., Issakidis, C., Slade, T., & Andrews, G. (2006). Gender differences in the

prevalence of DSM-IV and ICD-10 PTSD. *Psychological Medicine, 36,* 81-89.

Rieker, P., & Carmen, E. (1986). The victim-to-patient process: The disconfirmation and transformation of abuse. *American Journal of Orthopsychiatry, 56,* 360-370.

Rienzi, B.M., Forquera, J., & Hitchcock, D.L. (1995). Gender stereotypes for proposed DSM-IV negativistic, depressive, narcissistic, and dependent personality disorders. *Journal of Personality Disorders, 9,* 49-55.

Roth, S., Newman, E., Pelcovitz, D., van der Kolk, B.A., & Mandel, F. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *Journal of Traumatic Stress, 10* (4), 539-555.

Shea, M.T., Stout, R.L., Yen, S., Pagano, M.E., Skodol, A.E., Morey, L.C., et al. (2004). Associations in the course of personality disorders and axis I disorders over time. *Journal of Abnormal Psychology, 113* (4), 499-508.

Sherwood, R., Funari, D., & Piekarski, A. (1990). Adapted character styles of Vietnam veterans with posttraumatic stress disorder. *Psychological Reports, 66,* 623-631.

Southwick, S., Yehuda, R., & Giller, E. (1993). Personality disorders in treatment seeking combat veterans with posttraumatic stress disorder. *American Journal of Psychiatry, 150,* 1020-1023.

Sprock, J. (1996). Abnormality ratings of the DSM-III-R personality disorder criteria for males versus females. *Journal of Nervous and Mental Disease, 184,* 314-316.

Sprock, J., Crosby, J., & Nielsen, B. (2001). Effects of sex and sex roles on the perceived maladaptiveness of DSM-IV personality disorder symptoms. *Journal of Personality Dosorders, 15* (1), 41-59.

Sprock, J., Blashfield, R., & Smith, B. (1990). Gender weighting of DSM-III-R personality disorder criteria. *The American Journal of Psychiatry, 147* (5), 586-590.

Stefan, S. (1998). Impact of the law on women with diagnoses of borderline personality disorder related to childhood sexual abuse. In B.L. Levin, A.K. Blanch, & A. Jennings, *Women's mental health services: A public health perspective* (pp. 240-278). Thousand Oaks, CA: Sage.

Stone, M.H., Unwin, A., Beacham, B., & Swenson, C. (1988). Incest in female borderlines: Its frequency and impact. *International Journal of Family Psychiatry, 9,* 277-293.

Surrey, J., Swett, C., Michaels, A., & Levin, S. (1990). Reported history of physical and sexual abuse and severity of symptomatology in women psychiatric outpatients. *American Journal of Orthopsychiatry, 60,* 412-417.

Thoit, P. (1991). Gender differences in coping with emotional distress. In J. Eckenrode (Ed.), *The social context of coping* (pp. 107-138). New York: Plenum Press.

van der Kolk, B.A., Pelcovitz, D., Roth, S., Mandel, F.S., McFarlane, A., & Herman, J.L. (1996). Dissociation, somatization, and affect dysregulation: The complexity of adaptation to trauma. *American Journal of Psychiatry, 153* (7), 83-93.

van der Kolk, B.A., Perry, J.C, & Herman, J.L. (1991). Childhood origins of self-destructive behavior. *American Journal of Psychiatry, 148* (12), 1665-1671.

van der Kolk, B.A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress, 18* (5), 389-399.

Walker, J., Carey, P., Mohr, N., Stein, D., & Seedat, S. (2004). Gender differences in the

prevalence of childhood sexual abuse and the development of pediatric PTSD. *Archives of Women's Mental Health, 7,* 111-121.

Wheeler, B.R., & Walton, E. (1987). Personality disturbances of adult incest victims. *Social Casework, 68,* 597-602.

Widiger, T.A. (1998). Invited essay: sex biases in the personality disorders. *Journal of Pesonality Disorders, 12* (2), 95-118.

Williams, J.B., & Spitzer, R.L. (1983). The issue of sex bias in the DSM-III: Critique of "A woman's view of DSM-III" by Marcie Kaplan. *American Psychologist, 38,* 793-798.

World Health Organization. (1990). *International classification of mental disorders, 10th revision.* Geneva: Author.

Yehuda, R., & McFarlane, A. (1995). Conflict between current knowledge about posttraumatic stress disorder and its original conceptual basis. *American Journal of Psychiatry, 152* (12), 1705-1713.

Yen, S., & Shea, M.T. (2001). Recent developments in research of trauma and personality disorders. *Current Psychiatry Reports, 3,* 52-58.

Zanarini, M., Williams, A., Lewis, R., Reich, R., Vera, S., Marino, M., et al. (1997). Reported pathological childhood experiences associated with the development of borderline personality disorder. *American Journal of Psychiatry, 154* (8), 1101-1106.

Zlotnick, C., Franklin, C.L., & Zimmerman, M. (2002). Is comorbidity of posttraumatic stress disorder and borderline personality disorder related to greater pathology and impairment? *American Journal of Psychiatry, 159* (11), 1940-1943.

Zlotnick, C., Johnson,D., Yen, S., Battle, C., Sanislow, C., Skodol, A., et al. (2003). Clinical features and impairment in women with borderline personality disorder (BPD) with posttraumatic stress disorder (PTSD), BPD without PTSD, and other personality disorders with PTSD. *The Journal of Nervous and Mental Disease, 191* (11), 706-713.

Appendix A

DSM-IV-TR (APA, 2000, p.467) DIAGNOSTIC CRITERIA FOR POSTTRAUMATIC STRESS DISORDER:

A. The person has been exposed to a traumatic event in which both of the following were present:

(1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others

(2) the person's response involved intense fear, helplessness, or horror. Note: In children, this may be expressed instead by disorganized or agitated behavior

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

(1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed

(2) recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content

(3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific reenactment may occur

(4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

(5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma

(2) efforts to avoid activities, places, or people that arouse recollections of the trauma

(3) inability to recall an important aspect of the trauma

(4) markedly diminished interest or participation in significant activities

(5) feeling of detachment or estrangement from others

(6) restricted range of affect (e.g., unable to have loving feelings)

(7) sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:

(1) difficulty falling or staying asleep

(2) irritability or outbursts of anger

(3) difficulty concentrating

(4) hypervigilance

(5) exaggerated startle response

E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify if:
Acute: if duration of symptoms is less than 3 months
Chronic: if duration of symptoms is 3 months or more

Specify if:
With Delayed Onset: if onset of symptoms is at least 6 months after the stressor

Appendix B

DIAGNOSTIC CATEGORIES FOR DISORDERS OF EXTREME STRESS, NOT OTHERWISE SPECIFIED (DESNOS; van der Kolk et al., 2005, p. 391):

I. Alteration in Regulation of Affect and Impulses
(A and 1 of B–F required):
A. Affect Regulation (2)
B. Modulation of Anger (2)
C. Self-Destructive
D. Suicidal Preoccupation
E. Difficulty Modulating Sexual Involvement
F. Excessive Risk-taking

II. Alterations in Attention or Consciousness
(A or B required):
A. Amnesia
B. Transient Dissociative Episodes and Depersonalization

III. Alterations in Self-Perception
(Two of A–F required):
A. Ineffectiveness
B. Permanent Damage
C. Guilt and Responsibility
D. Shame
E. Nobody Can Understand
F. Minimizing

IV. Alterations in Relations With Others
(One of A–C required):
A. Inability to Trust
B. Revictimization
C. Victimizing Others

V. Somatization
(Two of A–E required):
A. Digestive System
B. Chronic Pain
C. Cardiopulmonary Symptoms
D. Conversion Symptoms
E. Sexual Symptoms

VI. Alterations in Systems of Meaning
(A or B required):
A. Despair and Hopelessness

B. Loss of Previously Sustaining Beliefs

Note. Numbers in parentheses indicate number of subscale items required for endorsement of subscale. Only one item required for endorsement of all other subscales.

Appendix C

DSM-IV-TR (APA, 2000, p. 710) DIAGNOSTIC CRITERIA FOR BORDERLINE PERSONALITY DISORDER:

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, as indicated by five (or more) of the following:

(1) frantic efforts to avoid real or imagined abandonment. Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5

(2) a pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation

(3) identity disturbance: markedly and persistently unstable self-image or sense of self

(4) impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5

(5) recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior

(6) affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days)

(7) chronic feelings of emptiness

(8) inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights)

(9) transient, stress-related paranoid ideation or severe dissociative symptoms

Appendix D

PROFESSIONAL ACTIVITIES OF PARTICIPANTS

Participants indicated what percentage of time they spent in clinical work, administration, teaching, research, consultation, or other activities:

	% of Time Spent	Frequency (%)
Clinical	100	15 (12.2%)
	75-99	36 (29.3%)
	50-74	35 (28.4%)
	25-49	15 (12.2%)
	0-24	22 (17.9%)
Administrative	50-100	10 (8.1%)
	25-49	14 (11.3%)
	0-24	99 (80.6%)
Teaching	50-100	6 (4.8%)
	25-49	7 (5.6%)
	0-24	110 (89.6%)
Research	50-100	4 (3.2%)
	25-49	3 (2.4%)
	0-24	116 (94.4%)
Consultation	50-100	4 (3.2%)
	25-49	14 (11.3%)
	0-24	105 (85.5%)
Other	50-100	3 (2.4%)
	25-49	1 (.8%)
	0-24	119 (96.8%)

Participants indicated what percentage of their clinical work was spent working with specific populations:

	% of Time Spent	Frequency (%)
Inpatient[a]	50-100	24 (19.8%)
	25-49	2 (1.6%)
	0-24	95 (78.6%)

Outpatient[a]	100	80 (66.2%)
	50-99	19 (15.7%)
	25-49	3 (2.4%)
	0-24	19 (15.7%)
Children (12 and under)	50-100	8 (6.4%)
	25-49	7 (5.7%)
	0-24	108 (87.9%)
Adolescents (13-17)	50-100	9 (7.3%)
	25-49	13 (10.6%)
	0-24	101 (82.1%)
Young Adults (18-29)	50-100	10 (8.1%)
	25-49	36 (29.3%)
	0-24	77 (62.6%)
Adults (30-45)	50-100	14 (11.3%)
	25-49	56 (45.6%)
	0-24	53 (43.1%)
Middle Aged (46-64)	50-100	9 (7.3%)
	25-49	40 (32.6%)
	0-24	74 (60.1%)
Older Adults (65+)	50-100	3 (2.4%)
	25-49	12 (9.7%)
	0-24	108 (87.9%)

[a] = Two participants did not respond to the item indicating the percentage of time spent working with inpatient/outpatient populations (*N*=121).

Participants indicated what disorders they commonly encountered in the course of their clinical work:

Disorder	Frequency (%)
Disorders usually diagnosed in infancy, childhood or adolescence:	52 (42%)
Delirium, Dementia, Amnestic and Other Cognitive Disorders	24 (20%)

Mental Disorders Due to a General Medical Condition	41 (33%)
Substance-Related Disorders	55 (45%)
Schizophrenia and Other Psychotic Disorders	38 (31%)
Mood Disorders	112 (91%)
Anxiety Disorders	111 (90%)
Somatoform Disorders	29 (24%)
Factitious Disorders	8 (7%)
Dissociative Disorders	19 (15%)
Sexual and Gender Identity Disorders	18 (15%)
Eating Disorders	31 (25%)
Sleep Disorders	39 (32%)
Impulse-Control Disorders Not Elsewhere Classified	55 (45%)
Adjustment Disorders	101 (82%)
Personality Disorders	84 (68%)

Appendix E

VIGNETTE A

Karen/Brian, a 34-year-old woman/man, was referred to a therapist after being hospitalized subsequent to attempting to kill her/himself by taking several medications s/he had on hand and consuming a bottle of wine. This was her/his fourth hospitalization in the last two years. The previous hospitalizations had all been precipitated by similar suicide attempts, or self-injury in the form of burning her/himself with a cigarette lighter. Karen/Brian explained to hospital staff that s/he had to burn her/himself sometimes, because otherwise she would "go crazy." Indeed, s/he was observed to get extremely upset for extended periods of time over what appeared to be minor stressors in the hospital (e.g., having to wait to use the telephone). After one conflict with another patient, s/he banged her/his head against the wall and had to be restrained. During the restraint, Karen/Brian appeared to be experiencing a childhood memory, crying out that s/he wouldn't take her underwear off and asking repeatedly for her/his grandmother, who had raised her/him for several years during her childhood. Karen/Brian reported that her/his childhood had been a "nightmare," with her/him bouncing between relatives and foster homes as her/his mother went in and out of drug treatment programs and lived with a series of abusive men. Karen/Brian refused to talk about any of her/his mother's boyfriends or her/his experiences with them, simply stating that, "I hope they all rot in hell." Karen/Brian was removed from her/his mother's care for the first time when s/he was six months old, and several times thereafter due to severe neglect (e.g., failure of mother to provide food, shelter). As an adult, Karen/Brian used drugs heavily until s/he entered a detoxification program, which s/he successfully completed. Karen/Brian reported that s/he no longer abuses drugs or alcohol, but finds s/he sometimes drinks and uses marijuana to temporarily escape. Karen/Brian reported significant sleep problems, often not falling asleep until two or three in the morning, because s/he "can't turn her/his mind off and stop remembering stuff." Karen has frequent nightmares whose content she cannot remember upon waking. S/He also reported that "everything" scares her/him, that s/he startles easily, and that s/he once broke a man's nose after being startled when he approached her/him from behind to return an item s/he had dropped. S/He often has panic attacks when away from home. Due to these attacks, s/he no longer can ride in crowded subway cars. Karen/Brian is significantly overweight, reported feeling depressed about this, and has chronic heartburn. S/He also reported

frequent unexplained headaches. Karen/Brian reported that the only thing that helps her/him feel better is “stuffing” her/himself with food. S/He has no friends, and only intermittent contact with her/his mother. Karen/Brian works part-time, but s/he finds that s/he often has difficulty focusing on her/his work, because s/he is thinking about “all the bad things that happened to me.” This has caused her/him to be fired on several occasions. More typically, however, s/he quits when s/he becomes involved in a dispute with a fellow employee or boss. Karen/Brian reported similar disputes with romantic partners, resulting in a series of failed relationships. Karen/Brian has been in therapy in the past, and s/he reported that none of the therapists truly understood her/him, and that s/he ultimately left therapy each time, feeling disappointed and betrayed again. When asked what s/he does to help her/himself cope with the difficulties in her/his life, Karen/Brian replied, “Just not think about things, I guess.” Karen/Brian also reported stock piling broken glass. Although s/he has never actually cut her/himself, s/he stated that just knowing it is there comforts her/him.

Appendix F

VIGNETTE B

Lisa/Gary is a slightly overweight, 35-year-old, single female/male employed full-time in a factory. S/He lives in a rural community in a house that s/he rents with four other women/men, most of whom work for the same factory as Lisa/Gary. Lisa/Gary was referred by a pastoral counselor secondary to increased difficulty controlling anger, concentration problems, and intermittent violent outbursts with coworkers and housemates. These problems had recently become exacerbated to the extent that her/his employment and living arrangements were in jeopardy. A history of Lisa's/Gary's present illness revealed that s/he suffered chronic back pain from a work-related injury three years ago and headaches. Lisa's/Gary's medical providers, however, believed that the continued severity of this back pain was in excess of what could be attributable to her/his specific form of injury. The suspicion that psychological problems exacerbated Lisa's/Gary's level of chronic pain resulted in a consulting physician asking Lisa/Gary whether s/he had any history of child maltreatment or abuse. These questions reactivated her/his long-suppressed, albeit never forgotten, memories of repeated beatings followed by sexual molestation for a period of approximately 2 years as a prepubertal early adolescent at the hands of a trusted recreational counselor at Lisa's/Gary's church. When Lisa's/Gary's memories of childhood molestation were reactivated, they were accompanied by a resurgence of intense emotional distress including feelings of anger, shame, aggressive ideation, and desire for retaliation which precipitated increased volatility and fighting with her/his coworkers and housemates. Lisa's/Gary's history of childhood maltreatment was complicated by her/his experience of preferential treatment and affection by the perpetrator before and after instances of abuse. Further, the abuse occurred against the backdrop of parental emotional neglect and disapproval, scholastic problems, and social rejection by peers. Lisa's/Gary's father was a minister whom Lisa/Gary perceived as stern and unavailable. While Lisa/Gary identified her/his mother as a comparatively greater source of affection and nurturance, s/he explained that due to his family's financial hardship s/he rarely saw her/his mother as she was typically required to work two jobs and suffered from exhaustion and frequent physical illness. In contrast, Lisa's/Gary's recreational counselor through the church took special notice of and interest in Lisa/Gary and gave her/him unique privileges and responsibilities. These

activities became a source of pride and competence for Lisa/Gary. When her/his special "friendship" escalated into secret beatings and molestation in the gardening shed, accompanied by alternating expressions of endearment and debasement, Lisa/Gary experienced deep ambivalence and confusion. Unable to report these violations out of fear of losing her/his important attachment to the counselor, Lisa/Gary quietly endured this abuse. Lisa/Gary ultimately dropped out of school at age 16 and began working. Soon thereafter s/he moved out of her/his family home. Lisa's/Gary's twenties were characterized by periodic heavy drinking, and occasional violent outbursts. Lisa/Gary reported having a number of acquaintances and casual friends. However, while perceived by her/his peers to be at core a kindhearted and well-intentioned person, Lisa's/Gary's unpredictable temper, in addition to her/his guarded distrust of others, prevented her/him from forming more meaningful friendships. Similarly, her/his experience with dating was extremely limited and short-term.

Appendix G

DIAGNOSTIC RATING SCALES, CATEGORICAL DIAGNOSES,
AND SYMPTOM RATING SCALES

Rate each of the following diagnoses in terms of how descriptive it is of the above case:

1 = Not at all descriptive 7 = Highly descriptive
1 2 3 4 5 6 7

_____ Antisocial PD
_____ Avoidant PD
_____ Bipolar Disorder
_____ Borderline PD
_____ Dependent PD
_____ Depressive PD
_____ Dissociative Identity Disorder
_____ Dissociative Disorder NOS
_____ Dysthymic Disorder
_____ Generalized Anxiety Disorder
_____ Histrionic PD
_____ Major Depressive Disorder
_____ Narcissistic PD
_____ Obsessive-Compulsive PD
_____ Panic Disorder
_____ Paranoid PD
_____ Posttraumatic Stress Disorder
_____ Schizoid PD
_____ Schizotypal PD
_____ Social Phobia
_____ Somatization Disorder

Choose the <u>one</u> diagnosis most representative of the above case and enter the number of that diagnosis below:

1. Antisocial PD
2. Avoidant PD
3. Bipolar Disorder
4. Borderline PD
5. Dependent PD
6. Depressive PD
7. Dissociative Identity Disorder
8. Dissociative Disorder NOS
9. Dysthymic Disorder
10. Generalized Anxiety Disorder
11. Histrionic PD
12. Major Depressive Disorder
13. Narcissistic PD
14. Obsessive-Compulsive PD
15. Panic Disorder
16. Paranoid PD
17. Posttraumatic Stress Disorder
18. Schizoid PD
19. Schizotypal PD
20. Social Phobia
21. Somatization Disorder

The most representative diagnosis is: _____

How confident are you in your diagnosis of this client?

1 = Not at all confident 7 = Very confident
1 2 3 4 5 6 7

Confidence Rating = _____

What is the overall severity in this case?

1 = Very mild 7 = Very severe
1 2 3 4 5 6 7

Severity Rating = _____

What prognosis would you give this client?

1 = Very poor 7 = Very good
1 2 3 4 5 6 7

Prognostic Rating = _____

Rate the likelihood of the client in this case responding to treatment:

1 = Not at all likely 7 = Very likely
1 2 3 4 5 6 7

Rate the following symptoms in terms of how representative it is of the above case:

1 = Not at all representative 7 = Highly representative
1 2 3 4 5 6 7

_____ Profound loss of previously sustaining beliefs, leading to pervasive sense of despair
_____ Diminished interest or participation in significant activities
_____ Pervasive sense of hopelessness
_____ Sense of a foreshortened future
_____ Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating)
_____ Exhibits hypervigilance
_____ Exhibits heightened risk-taking behavior
_____ Difficulty falling or staying asleep
_____ Difficulty concentrating

_____ Experiences somatic symptoms, such as digestive problems,
_____ Experiences chronic pain
_____ Experiences cardiopulmonary symptoms
_____ Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
_____ Feeling of detachment or estrangement from others
_____ Transient, stress-related paranoid ideation or severe dissociative symptoms
_____ Efforts to avoid real or imagined abandonment
_____ Exhibits a pervasive inability to trust others
_____ Minimizes traumatic experiences, believes they have had little impact or are unrelated to present difficulties
_____ Recurrent and intrusive recollections of a traumatic event, including thoughts, images or perceptions
_____ Recurrent distressing dreams of a traumatic event
_____ Feels guilty and responsible for own mistreatment
_____ Feels excessive sense of shame
_____ Feels unique, that nobody can understand their experience
_____ Exhibits exaggerated startle response
_____ Is sexually preoccupied or has difficulty modulating sexual impulses
_____ Lacks ability to accurately read signs of danger, and expects mistreatment from others so is frequently revictimized
_____ Acts out by victimizing others
_____ Acting or feeling as if a traumatic event were recurring (includes sense of reliving the experience, illusions, hallucinations, dissociative episodes)
_____ A pattern of intense and unstable interpersonal relationships characterized by alternating between extremes of idealization and devaluation
_____ Efforts to avoid thoughts, feelings, or conversations associated with the trauma
_____ Experiences amnesia, either for discrete episodes or for whole periods of personal history, or may be very forgetful on a regular basis
_____ Identity disturbance: markedly and persistently unstable self-image or sense of self
_____ Perceives self as ineffective or helpless
_____ Perceives self as permanently damaged
_____ Perceives self as undesirable to others
_____ Chronic feelings of emptiness
_____ Efforts to avoid activities, places or people that arouse recollections of the trauma
_____ Inability to recall an important aspect of the trauma
_____ Dissociates or withdraws when confronted with painful emotions or reminders of traumatic experiences, or may experience depersonalization
_____ Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
_____ Recurrent suicidal behavior, threats or gestures, or self-mutilating behavior
_____ Exhibits frequent suicidal or self-harm preoccupation
_____ Uses self-destructive measures such as substance use, eating disorders to modulate affect
_____ Restricted range of affect

_____ Experiences sexual somatic symptoms, such as chronic pelvic pain
_____ Manifests conversion symptoms
_____ Inappropriate, intense anger or difficulty controlling anger
_____ Overreacts to minor stresses, has extreme reactions to neutral or mild stimuli
_____ Has great difficulty modulating or expressing anger
_____ Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety lasting a few hours and only rarely more than a few days)
_____ Irritability or outbursts of anger

Appendix H

DEMOGRAPHIC QUESTIONNAIRE

Age: _____ Sex: Male _____Female _____

Ethnic Background:
African American/Black _____ Asian/Pacific Islander _____ Hispanic _____
Native American _____ White/Non-Hispanic _____ Biracial/Multiracial _____
Other (specify) _____

Degree: Ph.D. ____ Psy.D. ____ Ed.D. ____

Years of Clinical Experience Since Receiving Degree: _____

Primary Theoretical Orientation: Cognitive-Behavioral _____ Eclectic _____
Humanistic _____ Psychodynamic _____ Other (specify) _____

Enter the number of the primary setting in which you work. Enter the number for secondary and tertiary settings also, if applicable:

1. Community Mental Health Center
2. University Medical School
3. Private Psychiatric Facility
4. General Medical Hospital
5. Private Practice
6. Correctional Facility
7. VA Medical Center
8. State Psychiatric Facility
9. University Psychology Department
10. Other

Primary = _____ Secondary = _____ Tertiary = _____

Percent of your client population that is (total should equal 100%):
Inpatient _____ Outpatient _____

Type of disorders you commonly encounter in your clinical practice (check all that apply):
_____ Disorders Usually Diagnosed in Infancy, Childhood, or Adolescence

_____ Delirium, Dementia, Amnestic and Other Cognitive Disorders

_____ Mental Disorders Due to a General Medical Condition

_____ Substance-Related Disorders

_____ Schizophrenia and Other Psychotic Disorders

_____ Mood Disorders

_____ Anxiety Disorders

_____ Somatoform Disorders

_____ Factitious Disorders

_____ Dissociative Disorders

_____ Sexual and Gender Identity Disorders

_____ Eating Disorders

_____ Sleep Disorders

_____ Impulse-Control Disorders Not Elsewhere Classified

_____ Adjustment Disorders

_____ Personality Disorders

Percent of time spent in each of the following activities (total should equal 100%):

Clinical Services _____ Administrative Services _____ Teaching _____

Research _____ Consultation _____ Other _____

Percent of your clinical work with the following groups (total should equal 100%):

Children (12 and under): _____ Adolescents (13-17): _____

Young Adults (18-29): _____ Adults (30-45): _____

Middle Aged (46-64): _____ Older Adults (65+): _____

Appendix I

THANKS/DEBRIEFING PAGE

Thank you for your participation. My study is investigating clinicians' perceptions in diagnosing individuals who have experienced trauma. If you would like to receive information regarding the results of the study upon its completion, we will be glad to provide you with a summary of results. Additionally, you are invited to participate in a raffle in which 3 Best Buy gift cards, valued at $50.00 each, will be raffled off to participants in this study. Please enter your email address below if you would like to request results and/or enter the raffle. Your responses to the previous survey questions will not be linked to this information.

I would like to receive a summary of the results of this study. Please send to the following email address: _____

I would like to be entered in the raffle. Please notify me if I win at the following email address:

_____

Appendix J

LETTER OF INVITATION TO PARTICIPATE

Dear Clinician, Date

I am a doctoral student in clinical psychology at Indiana State University and am writing to request your participation in my doctoral dissertation exploring clinicians' diagnostic conceptualizations of clients. In order to make your participation as convenient as possible, the study data will be collected via a website. The study should take approximately 15 minutes to complete. Your participation would be most appreciated. I understand your time is likely limited, as well as valuable. In appreciation for your participation, I would also like to invite you to enter a raffle to win one of three $50.00 gift cards for the electronics store, Best Buy. This raffle may be entered upon completion of the survey.

If you agree to participate, please access the study webpage at the following web address: http://XXXX and use the verification code YYYY. The verification code is being used merely to ensure that only those clinicians invited to participate can access the study webpage; the code cannot be used to identify individual respondents. There will be no means of associating the data you submit with your email address. It is recommended that you cut and paste the above address into your web browser to access the webpage; typing the link in may result in errors in accessing the page.

Once you access the site, you will be asked to enter the verification code, read two brief case vignettes, answer some questions following each vignette, and provide demographic and professional information about yourself. You will then have an opportunity to enter the raffle, and also to request the results of the study once it is completed, should you choose.

If you have questions regarding the study please contact me or the project director, June Sprock, Ph.D., through the Indiana State University Psychology Department at (812) 237-2445 by phone, or by email: aknowles@indstate.edu or j-sprock@indstate.edu.

Thank you for your time and effort and for your appreciation of the importance of supporting student research in psychology.

Sincerely,

Awen Knowles, M.S.
Doctoral Student, Clinical Psychology, Indiana State University

Appendix K

INFORMED CONSENT PAGE

Thank you for your participation in my study. The study is exploring the diagnostic processes of clinicians. You will be asked to read two brief case vignettes, and then to respond to a series of questions. Your responses will be submitted anonymously, and there will be no means of associating the data you submit with your email address or any other identifying information. Although I will make every effort to protect confidentiality, I cannot ensure complete confidentiality on the Internet. The survey should take approximately 15 minutes. Participation is entirely voluntary, and you may choose to decline to participate at any time by simply logging off of the website. You may also skip any questions that you do not want to answer.

In appreciation for your participation, you are invited to enter a raffle upon completion of the survey. Three $50.00 gift cards to the electronics store, Best Buy, will be raffled off after all data collection is completed. Should you choose to enter this raffle, an email address will be provided at the end of the survey. Additionally, you may request to receive results of the study upon its completion if you would like. By entering the code in the box below, you are consenting to voluntarily participate in this study. To begin, enter the code in the following box. Hitting the Next button will take you to the first page of the survey.

Insert Code:_____

Next

Appendix L

MEAN RATINGS FOR EACH SYMPTOM OF PTSD, BPD, AND DESNOS: VIGNETTE A

PTSD

Symptom	*M*	*SD*	*N*
sleep difficulty	6.05	1.32	120
intrusive thoughts	5.98	1.25	121
startles easily	5.97	1.49	119
reactivity to trauma cues	5.60	1.50	119
physiological reactivity	5.51	1.50	120
recurrent dreams of trauma	5.46	1.66	120
cognitive avoidance	5.39	1.66	121
difficulty concentrating	5.39	1.76	119
hypervigilence	5.33	1.81	120
anger outbursts	5.22	1.71	120
detachment	5.17	1.54	121
flashbacks	5.14	1.62	121
behavioral avoidance	4.32	1.87	121
foreshortened future	4.27	1.93	121
amnesia for trauma	3.53	1.90	119
restricted affect	3.50	1.97	119

BPD

Symptom	*M*	*SD*	*N*
suicidal threats/gestures	6.60	.852	121
impulsivity	6.04	1.28	121
marked mood reactivity	5.26	1.69	121
intense/inappropriate anger	5.14	1.69	119
chronic emptiness	4.73	1.89	120
avoids abandonment	4.67	1.83	119
idealizes/devalues	4.57	1.96	120
paranoia/dissociation	4.25	1.84	120
identity disturbance	4.25	1.87	120

DESNOS

Symptom	*M*	*SD*	*N*
self-harm preoccupation	6.47	.958	121
substance/eating disorders	6.43	.982	121
overreacts to stressors	5.66	1.45	119
difficulty expressing anger	5.37	1.51	119
inability to trust	5.31	1.65	119
hopelessness	5.04	1.72	121
feels unique	4.97	1.81	119
risk-taking	4.81	1.89	121
chronic pain	4.79	1.97	121
views self as damaged	4.66	1.68	119
views self as helpless	4.54	1.68	120
views self as undesirable	4.50	1.73	120
revictimized	3.76	2.01	119
excessive shame	3.61	1.75	119
somatic symptoms	3.36	1.91	121
loss of sustaining beliefs	3.25	1.97	120
amnesia for own history	2.92	1.81	121
guilt about own mistreatment	2.87	1.63	120
victimizes others	2.66	1.60	119
minimizes trauma	2.63	1.78	120
conversion symptoms	2.61	1.69	114
sexually preoccupied	2.43	1.64	119
cardio-pulmonary symptoms	2.23	1.45	120
sexual pain symptoms	2.01	1.46	121

Note. Symptoms are abbreviated in the above table; see Appendix G for the actual wording used for symptom descriptions in the survey.

Appendix M

DESCRIPTIVE STATISTICS FOR PARTICIPANTS'
RATINGS OF CONFIDENCE, SEVERITY, PROGNOSIS AND TREATMENT RESPONSE

Vignette A

Variable	*M*	*SD*	*N*
Confidence	5.37	1.10	121
Severity	6.19	.823	120
Prognosis	3.30	1.32	121
Response to treatment	4.06	1.37	120

Vignette B

Variable	*M*	*SD*	*N*
Confidence	4.88	1.39	121
Severity	5.21	.836	121
Prognosis	4.49	1.16	121
Response to treatment	4.59	1.24	121

Note. Confidence = participants' ratings of confidence in their categorical diagnosis (1 = *not at all confident*, 7 = *very confident*). The other ratings provided participants' overall assessment of the client in the vignette, including Severity (1 = *very mild*, 7 = *very severe*), Prognosis (1 = *very good*, 7 = *very poor*), and likelihood of Response to treatment (1 = *not at all likely*, 7 = *very likely*).

Appendix N

MEAN RATINGS FOR EACH SYMPTOM OF PTSD, BPD, AND DESNOS: VIGNETTE B

PTSD

Symptom	*M*	*SD*	*N*
anger outbursts	6.54	.829	120
physiological reactivity	4.82	1.86	121
detachment	4.73	1.69	119
difficulty concentrating	4.70	2.01	121
reactivity to trauma cues	4.68	1.87	120
intrusive thoughts	4.48	1.78	120
cognitive avoidance	4.21	1.80	121
restricted affect	3.66	2.02	120
hypervigilence	3.31	1.73	121
behavioral avoidance	3.26	1.89	119
foreshortened future	3.01	1.68	120
flashbacks	3.01	1.78	119
startles easily	2.92	1.85	119
recurrent dreams of trauma	2.82	1.86	119
amnesia for trauma	2.76	1.83	119
sleep difficulty	2.50	1.68	121

BPD

Symptom	*M*	*SD*	*N*
intense/inappropriate anger	6.45	.912	119
marked mood reactivity	4.66	2.00	121
impulsivity	4.17	2.08	121
chronic emptiness	3.69	1.95	120
avoids abandonment	3.63	1.97	119
idealizes/devalues	3.57	1.99	120
identity disturbance	3.25	1.86	120
paranoia/dissociation	2.87	1.70	121
suicidal threats/gestures	1.87	1.32	119