

Borderline Personality Characteristics: A Betrayal Trauma Approach

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Borderline Personality Disorder (BPD) has been associated with both trauma and insecure attachment styles. Betrayal Trauma Theory proposes survivors of interpersonal trauma may remain unaware of betrayal in order to maintain a necessary attachment. This preliminary study reports on the relations between self-reports of betrayal trauma experiences and borderline personality characteristics in a college sample. Using multiple regression, betrayal was significantly associated with BPD characteristics. High-betrayal trauma was the largest contributor to borderline traits and medium-betrayal trauma was also a significant predictor. However, traumas of low betrayal were not associated with BPD features. These results stand even after controlling for gender. These findings suggest betrayal may be a key, and yet heretofore unaddressed, feature of borderline personality disorder.

Keywords: borderline personality disorder, betrayal trauma, abuse, attachment

The American Psychiatric Association (APA) defines Borderline Personality Disorder (BPD) as “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 (APA, 2000, p. 710).” This serious mental disorder affects approximately 15%–20% of clinical inpatients (APA, 2000; Widiger & Frances, 1989), 10% of psychiatric outpatients (APA, 2000; Widiger & Frances, 1989), and 2% of the general population (APA, 2000; Lenzenweger, Lane, Loranger, & Kessler, 2007; Swartz, Blazer, George, & Winfield, 1990). It is interesting that 75% of those diagnosed are women (APA, 2000) and approximately 80% of clients receiving treatment for BPD are women (Skodol et al., 2002). Due to both the high prevalence rate and gender differences, there has been much speculation regarding how best to understand the etiological factors of this disorder, including a recent conceptualization of BPD in terms of attachment.

In this framework, research addressing BPD and attachment style has found associations between BPD and insecure attachment styles

(Levy, 2005). In fact, a review of studies addressing this link consistently found that borderline patients most frequently display either fearful or unresolved (with a secondary classification of preoccupied) attachment styles (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004). Fearful attachment style is a mistrustful attachment style where the person longs for intimacy but is afraid of being hurt or rejected. Unresolved with preoccupied features describes an attachment style in which the person also seeks an intimate relationship, but is sensitive to a perceived dependency. Those with unresolved attachment styles display lapses in reasoning when discussing trauma: they will make nonsensical statements regarding the causes and consequences of the traumatic event.

One threat to the development of a secure attachment with the caregiver is parental maltreatment (Baer & Martinez, 2006; Lamb, Gaensbauer, Malkin, & Schultz, 1985). Recent work by Minzenberg, Poole, and Vinogradov (2006) found attachment-anxiety to be significantly associated with childhood sexual abuse (CSA) and attachment-avoidance to be significantly related to all types of childhood maltreatment. These results are interesting due to the high prevalence of child maltreatment in those diagnosed with BPD.

CSA is frequently linked to BPD. The rate of CSA has been estimated to be as high as 75% in borderline patients, including both inpatient and outpatient samples (Battle et al., 2004). Furthermore, a history of CSA is a discriminating factor

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for BPD patients from a depressed, non-BPD sample of adolescents (Horesh, Sever, & Apter, 2003). Because of this, it has been suggested CSA may be an etiological factor for the development of BPD (Guzder, Paris, Zerkowicz, & Feldman, 1999; Zanarini et al., 1997). Furthermore, "sexual abuse contributed to the prediction of BPD symptoms over and above variables reflecting family environment, although family environmental factors such as instability partially mediated the effect" (Bradley, Jenei, & Westen, 2005, p. 29). However, CSA is not the only form of maltreatment associated with BPD. In addition to CSA, physical abuse, emotional abuse, and neglect are frequently observed and are all associated with the development of BPD (Battle et al., 2004; Herman, Perry, & Van der Kolk, 1989; Johnson, Smailes, Cohen, Brown, & Bernstein, 2000; Paris, 1997; Trull, 2001). Rates of maltreatment as high as approximately 90% have been found in BPD patients (Zanarini et al.). Since both trauma and attachment are related to BPD, a parsimonious and promising model in which to examine this disorder would include both these elements, for example, Betrayal Trauma Theory (BTT; Freyd, 1996).

Bowlby (1988, p. 121) suggests the attachment relationship "has a key survival function of its own, namely protection." BTT utilizes that premise to explain why persons may need to isolate specific knowledge that threatens survival (Freyd, 1996). A betrayal trauma is a type of trauma involving a violation of a trust necessary for survival. BTT proposes that in order to maintain a necessary attachment to a caregiver, a survivor of parental maltreatment must remain blind to that betrayal (Freyd, 1996). Experimental work using emotional Stroop and directed forgetting tasks has led support to BTT (DePrince & Freyd, 1999; DePrince & Freyd, 2001; DePrince & Freyd, 2004). Ordinarily it would be advantageous to be able to detect betrayal in order to prevent a future violation; however, if detecting that betrayal could result in immediate damage to the attachment with an essential caregiver, one may find it more adaptive to remain unaware of that violation (Freyd, 1996). One mechanism by which this may be accomplished is dissociation, which Bernstein and Putnam (1986, p. 727) define as "a lack of normal integration of thoughts, feelings, and experiences into the stream of consciousness and memory."

Severe dissociation is one of the diagnostic criteria for BPD and has been suggested to be one of the key, distinguishing components of BPD (Skodol et al., 2002; Wildgoose, Waller, Clarke, & Reid, 2000; Zweig-Frank, Paris, & Guzder, 1994). Yet, how dissociation relates to trauma in those diagnosed with BPD is unclear. Zweig-Frank and colleagues did not find an association between childhood trauma and dissociation in men and women diagnosed with BPD. A later study using a sample of male patients and prisoners (Timmerman & Emmelkamp, 2001) also corroborates the previous finding that childhood trauma and dissociation in BPD are not related. However, in a different study, total childhood trauma was not significantly associated with dissociation, although emotional neglect was (Simeon, Nelson, Elias, Greenberg, & Hollander, 2003). Furthermore, one study identified four risk factors for dissociation in BPD patients: "inconsistent treatment by a caretaker, sexual abuse by a caretaker, witnessing sexual violence as a child, and adult rape history" (Zanarini, Ruser, Frankenburg, Hennen, & Gunderson, 2000, p. 26). A study by Watson, Chilton, Fairchild, and Whewell (2006) did not find a significant correlation between dissociation and sexual abuse, but did find associations with physical abuse and emotional neglect, with emotional abuse as the strongest predictor of dissociation. Furthermore, there was a positive correlation between severity of trauma and levels of dissociation. The authors of this study suggest "rather than being an intrinsic component of BPD, dissociation and BPD may share childhood trauma as an etiological factor" (p. 480). BTT would propose the dissociation seen in BPD is a defense mechanism against childhood trauma to prevent dangerous information from entering consciousness. This theory posits the degree of the betrayal associated with the childhood trauma influences the encoding, subsequent accessibility to awareness, and responses to the event (Freyd, 1996).

Memory is intimately related to dissociation. Interested in cognitive encoding and memory in BPD, Cloitre, Cancienne, Brodsky, Dulit, and Perry (1996) compared 48 women with BPD to 24 healthy control women. Participants in the borderline, abused group had better explicit recall of to-be-remembered words than the borderline with no abuse history and control groups, thus they had enhanced directed forget-

ting. The authors interpret their findings in ways consistent with BTT. "Abused individuals have an enhanced capacity to focus attention toward and engage in increased elaboration of designated to-be-remembered information, leading to better selective retrieval (Cloitre et al., 1996, p. 209)." The authors view their findings as consistent with coping responses in which the child focuses on neutral stimuli during the periods of abuse. Furthermore, although they state the abuse may not be forgotten, the researchers do suggest the child may elaborate on positive interactions with the caregiver in order to maintain the attachment (Cloitre et al., 1996).

Jones et al. (1999) investigated autobiographical memory in BPD using the Autobiographical Memory Test (Williams & Broadbent, 1986). Participants are asked to recall specific events in their own lives when prompted by positive, negative, or neutral cue words. Specific memories are those in which the remembered event occurred on a specific day. General memories are those that happened repeatedly or had a longer time course. The BPD group recalled significantly more general events and had significantly more nonresponses to cues than the control group. Furthermore, borderline participants responded to negative cues with a disproportionate number of general memories. Researchers found a significant correlation between the number of general memories and severity of dissociation. Unfortunately, the study did not include a trauma history assessment.

BTT, developed from the attachment framework, describes how threatening information is kept from awareness to ensure survival. Cognitive mechanisms, such as dissociation, enable this blindness to happen. However, prior to the current study, no research has been conducted on BPD within a betrayal trauma framework. This is surprising given the theoretical connections between trauma, attachment, and dissociation to BPD. In fact, Herman (1992) suggests the primary difficulty in BPD is trust. The current study was designed to examine the association between betrayal traumas and BPD.

Hypotheses

It is predicted betrayal will be related to borderline personality characteristics such that: trauma with high betrayal (high-betrayal traumas) will be the largest predictor of these traits; trauma with medium betrayal (medium-betrayal traumas)

also will be correlated with borderline personality features, but to a lesser degree than high-betrayal traumas; and trauma with low betrayal (low-betrayal traumas) will not be associated with BPD.

Method

Participants

One hundred and 99 undergraduate students (73% women and 26% men) enrolled in an introductory psychology course at the University of Oregon participated in this study (mean age = 20.1, $SD = 3.40$). The sample identified predominantly as Caucasian (76.5%); 8.0% identified as Asian/Pacific Islander, 3.5% as Hispanic, 1.0% as African American, and 6.0% as Other. Students were recruited using an online registration system and they were given credit toward completion of a research requirement.

Materials and Procedure

The Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006) is a 12-item, self-report measure of major traumatic events participants may have experienced before age 12, between ages 12 to 17, and after age 18. Each item is classified as having one of three levels of betrayal: low, medium, or high. Noninterpersonal traumas (e.g., natural disasters) are conceptualized as a low-betrayal, while interpersonal traumas (e.g., being attacked) are considered a medium or high-betrayal. Relational closeness of the perpetrator distinguishes high-betrayal items from medium-betrayal items. An example of a low-betrayal item is "been in a major motor vehicle accident that resulted in significant loss of personal property, serious injury, death, or fear of own death." An example of a medium-betrayal item is "you were deliberately attacked so severely as to result in marks, bruises, blood, or broken bones by someone with whom you were *not* close [italics added]." An example of a high-betrayal item is "you were deliberately attacked that severely by someone with whom you were *very* close [italics added]." The BBTS has been demonstrated to have both good construct validity (DePrince & Freyd, 2001) and test-retest reliability (Goldberg & Freyd, 2006). The authors were interested in first-hand trauma experiences and so used 7 of the 12 items in data analyses. Scores

could range from 0 to 9 for high-betrayal and 0 to 6 for low and medium-betrayal.

Borderline personality traits were assessed using the Borderline Personality Inventory (Leichsenring, 1999). The BPI is a 53-item self-report measure evaluating characteristics typical of those diagnosed with BPD. It uses both a dimensional and categorical approach to borderline traits. Sample items include: "my feelings toward other people quickly change into opposite extremes (e.g., from love and admiration to hate and disappointment); if a relationship gets close, I feel trapped; and I enjoy having control over someone"). The BPI has good internal consistency and test-retest reliability (Leichsenring, 1999). The scale was revised from its original form in this way: instead of true-false responses, participants marked the veracity of the statements on a 5-point Likert-type scale, where 1 = very inaccurate, 2 = moderately inaccurate, 3 = neither accurate nor inaccurate, 4 = moderately accurate, and 5 = very accurate. Furthermore, only 47 of the original 53 items were administered, resulting in a possible score range of 47 to 235.

Procedures

Participants completed both instruments online as part of a general survey conducted through the psychology department human subjects pool. The general survey is a battery of approximately 15 questionnaires submitted by many researchers.

The ordering of the questionnaires was randomly assigned to each participant. IRB approval was obtained for the larger survey, which included these measures in the submission. The informed consent was administered for the General Survey in total. Participants were given an option to decline to answer any item. Before completing the survey, each respondent was given an identification number so responses were anonymous.

Results

Trauma History

Forty-eight percent of the sample indicated they experienced at least one type of first-hand trauma and 28.1% experienced at least one high-betrayal trauma. For each level of betrayal there was significant positive skewness: high (skewness = 2.32, $SE = .174$), medium (skewness = 2.77, $SE = .173$), and low (skewness = 3.60, $SE = .173$). Due to the low cell frequencies at the tail, those scores were combined, resulting in 4 score categories: 0, 1, 2, and 3 or more. High-betrayal was significantly correlated with medium-betrayal ($r = .257, p < .01$) and medium-betrayal was significantly correlated with low-betrayal ($r = .147, p < .05$). Gender was significantly correlated with high-betrayal ($r = .220, p < .01$), but not with medium-betrayal ($r = .068, p = NS$) or low-betrayal ($r = .048, p = NS$). Women ($M = .669, SD = 1.03$) had higher scores for high-

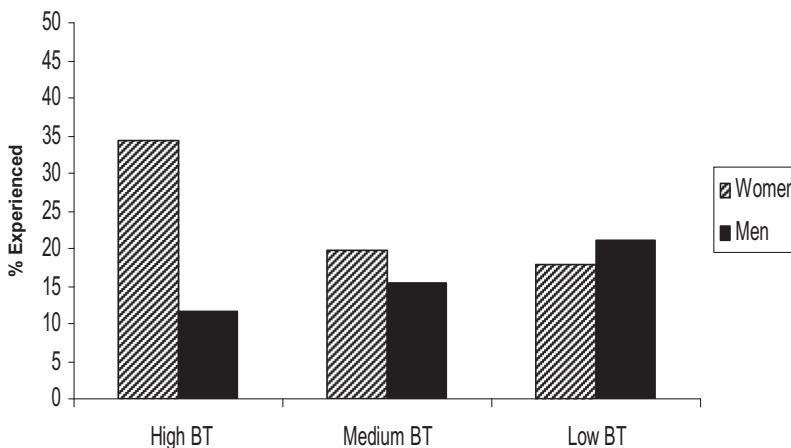


Figure 1. Betrayal traumas by gender.

betrayal experiences than men ($M = .196, SD = .566$).

Borderline Personality Traits

Mean BPI score was 85.3 ($SD = 26.5$). The scale had good reliability, Cronbach’s $\alpha = .944$. Age ($r = -.056, p = NS$), ethnicity ($r = -.062, p = NS$), and gender ($r = .096, p = NS$) were not significantly correlated with BPI score. However, borderline characteristics were significantly correlated with high-betrayal ($r = .342, p < .01$) and medium-betrayal ($r = .312, p < .01$), but not with low-betrayal ($r = .074, p = NS$).

Multiple Regression

To test the hypotheses of interest, a multiple regression analysis was conducted. The model, which included gender and the three levels of betrayal trauma, did significantly predict a portion of the variance in borderline traits, $F(4, 187) = 9.68, p < .001$, adjusted $r^2 = .154$. Results of the regression analysis are shown in Table 2. As predicted, high-betrayal trauma was the largest predictor of borderline personality features, $\beta = .287, t(187) = 4.06, p < .001$. Medium-betrayal trauma was also a significant predictor, $\beta = .228, t(187) = 3.29, p = .001$, whereas low-betrayal was not, $\beta = .007, t(187) = .101, p = NS$.

Discussion

These data suggest betrayal is associated with Borderline Personality Disorder. High-betrayal traumas were the largest contributor to explained variance of borderline characteristics and medium-betrayal traumas also sig-

Table 2
Multiple Regression Analysis for Betrayal Trauma Predicting BPI (N = 192)

Variable	B	SE B	β
Gender	1.47	4.08	0.25
High BT	7.92	1.95	.287**
Medium BT	9.26	2.82	.228**
Low BT	-0.29	2.90	-0.01

Note. $R^2 = .172$, adjusted $R^2 = .154, f^2 = .182$.
** $p \leq .001$.

nificantly predicted borderline features. In contrast, experiencing traumas with low-betrayal did not relate to borderline traits. These results are found even after controlling for gender, which provides valuable information in light of the large gender differences in BPD diagnoses. Since previous work (Goldberg & Freyd, 2006) has demonstrated that more women report high-betrayal trauma, the role of betrayal may be useful in understanding why more women are diagnosed. Since few men reported high-betrayal traumas, further research also should examine betrayal in men who are both diagnosed with BPD and who have experienced high-betrayal traumas.

There are several limitations to this study. The study sample was comprised solely of undergraduate students, which could be considered a highly resilient population. Since these students could be considered higher-functioning individuals, it would be interesting to examine betrayal in a more distressed sample. Another limitation of the study is the sample was predominately Caucasian. This limitation can be addressed in future research by oversampling minorities or using a different population. Furthermore, the rates of

Table 1
Correlations Between Age, Gender, Ethnicity, Betrayal Trauma, and BPI

	Age	Gender	Ethnicity	BPI total	High BT	Moderate BT	Low BT
Age	—						
Gender	-.098	—					
Ethnicity	.157*	-.152*	—				
BPI total	-.056	.096	-.062	—			
High BT	.094	.220**	-.015	.342**	—		
Moderate BT	.137	.068	-.099	.312**	.257**	—	
Low BT	.072	.048	-.025	.074	.126	.147*	—

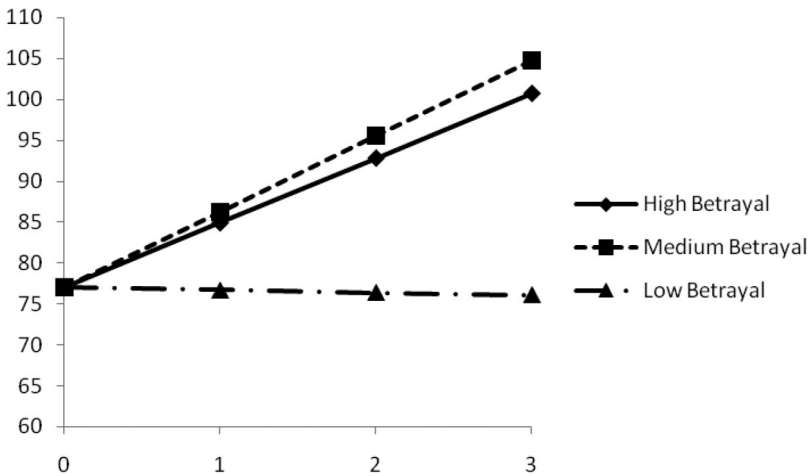


Figure 2. Types of betrayal trauma and BPI score using B as slope.

trauma were generally low, as well as the frequency of borderline traits. Future research should examine how betrayal relates to borderline characteristics in a clinical sample, which may also address the limitations previously mentioned.

The association between betrayal traumas and BPD was examined solely by self-report methods at one time period. It is not possible to determine causality. It could be said borderline personality features may predispose a person to experience high-betrayal traumas. Alternatively, the effects seen could be due to other variables not measured, and thus not evaluated, in this study. Future research can include other variables known to be related to BPD and betrayal traumas, such as dissociation and age of exposure.

Future plans include examining the age the trauma occurred in a diverse sample. It is predicted early childhood high-betrayal traumas would be a larger predictor of borderline traits than later events. We are also interested in exploring trust and awareness of betrayal in those diagnosed with BPD. Cognitive impairments have been shown in BPD (Fertuck, Lenzenweger, Clarkin, Hoermann, & Stanley, 2006). Future research can investigate these impairments to determine how betrayal trauma may be related to them. Specifically, we are interested in measuring memory impairment in BPD using a directed-forgetting or emotional Stroop task under divided atten-

tion conditions. BTT predicts less interference in this condition and more memory impairment for trauma-related items. If these results are observed, betrayal trauma theory may provide a useful paradigm for understanding this complicated disorder.

References

- Agrawal, H. R., Gunderson, J., Holmes, B. M., & Lyons-Ruth, K. (2004). Attachment studies with borderline patients: A review. *Harvard Review of Psychiatry, 12*, 94–104.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.
- Baer, J. C., & Martinez, C. D. (2006). Child maltreatment and insecure attachment: A meta-analysis. *Journal of Reproductive and Infant Psychology, 24*, 187–197.
- Battle, C. L., Shea, M., Johnson, D. M., Yen, S., Zlotnick, C., Zanarini, M. C., Sanislow, C. A., et al. (2004). Childhood maltreatment associated with adult personality disorders: Findings from the collaborative longitudinal personality disorders study. *Journal of Personality Disorders, 18*, 193–211.
- Bernstein, E. M., & Putnam, F. W. (1986). Development, reliability, and validity of a dissociation scale. *Journal of Nervous and Mental Disease, 174*, 727–735.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Bradley, R., Jenei, J., & Westen, D. (2005). Etiology of borderline personality disorder: Disen-

- tangling the contributions of intercorrelated antecedents. *Journal of Nervous And Mental Disease*, 193, 24–31.
- Cloitre, M., Caciennne, J., Brodsky, B., Dulit, R., & Perry, S. W. (1996). Memory performance among women with parental abuse histories: Enhanced directed forgetting or directed remembering? *Journal of Abnormal Psychology*, 105, 204–211.
- DePrince, A. P., & Freyd, J. J. (1999). Dissociative tendencies, attention, and memory. *Psychological Science*, 10, 449–452.
- DePrince, A. P., & Freyd, J. J. (2001). Memory and dissociative tendencies: The roles of attentional context and word meaning in a directed forgetting task. *Journal of Trauma & Dissociation*, 2, 67–82.
- DePrince, A. P., & Freyd, J. J. (2004). Forgetting trauma stimuli. *Psychological Science*, 15, 488–492.
- Fertuck, E. A., Lenzenweger, M. F., Clarkin, J. F., Hoermann, S., & Stanley, B. (2006). Executive neurocognition, memory systems, and borderline personality disorder. *Clinical Psychology Review*, 26, 346–375.
- Freyd, J. J. (1996). Betrayal trauma: The logic of forgetting childhood abuse. *Betrayal trauma: The logic of forgetting childhood abuse*. Cambridge, MA: Harvard University Press.
- Goldberg, L. R., & Freyd, J. J. (2006). Self-reports of potentially traumatic experiences in an adult community sample: Gender differences and test-retest stabilities of the items in a brief betrayal-trauma survey. *Journal of Trauma & Dissociation*, 7, 39–63.
- Guzder, J., Paris, J., Zerkowitz, P., & Feldman, R. (1999). Psychological risk factors for borderline pathology in school-age children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38, 206–212.
- Herman, J. L. (1992). *Trauma and recovery*. New York: Basic Books.
- Herman, J. L., Perry, J., & Van der Kolk, B. A. (1989). Childhood trauma in borderline personality disorder. *American Journal of Psychiatry*, 146, 490–495.
- Horesh, N., Sever, J., & Apter, A. (2003). A comparison of life events between suicidal adolescents with major depression and borderline personality disorder. *Comprehensive Psychiatry*, 44, 277–283.
- Johnson, J. J., Smailes, E. M., Cohen, P., Brown, J., & Bernstein, D. P. (2000). Associations between four types of childhood neglect and personality disorder symptoms during adolescence and early adulthood: Findings of a community-based longitudinal study. *Journal of Personality Disorders*, 14, 171–187.
- Jones, B., Heard, H., Startup, M., Swales, M., Williams, J., & Jones, R. (1999). Autobiographical memory and dissociation in borderline personality disorder. *Psychological Medicine*, 29, 1397–1404.
- Lamb, M. E., Gaensbauer, T. J., Malkin, C. M., & Schultz, L. A. (1985). The effects of child maltreatment on security of infant-adult attachment. *Infant Behavior & Development*, 8, 35–45.
- Leichsenring, F. F. (1999). Development and first results of the Borderline Personality Inventory: A self-report instrument for assessing borderline personality organization. *Journal of Personality Assessment*, 73, 45–63.
- Lenzenweger, M. F., Lane, M. C., Loranger, A. W., & Kessler, R. C. (2007). DSM-IV personality disorders in the national comorbidity survey replication. *Biological Psychiatry*, 62, 553–564.
- Levy, K. N. (2005). The implications of attachment theory and research for understanding borderline personality disorder. *Development and Psychopathology*, 17, 959–986.
- Minzenberg, M. J., Poole, J. H., & Vinogradov, S. (2006). Adult social attachment disturbance is related to childhood maltreatment and current symptoms in borderline personality disorder. *Journal of Nervous and Mental Disease*, 194, 341–348.
- Paris, J. (1997). Childhood trauma as an etiological factor in the personality disorders. *Journal of Personality Disorders*, 11, 34–49.
- Simeon, D., Nelson, D., Elias, R., Greenberg, J., & Hollander, E. (2003). Relationship of personality to dissociation and childhood trauma in borderline personality disorder. *CNS Spectrums*, 8, 760–762.
- Skodol, A. E., Gunderson, J. G., Pfohl, B., Widiger, T. A., Livesley, W., & Siever, L. J. (2002). The borderline diagnosis I: Psychopathology, comorbidity, and personality structure. *Biological Psychiatry*, 51, 936–950.
- Swartz, M., Blazer, D., George, L., & Winfield, I. (1990). Estimating the prevalence of borderline personality disorder in the community. *Journal of Personality Disorders*, 4, 257–272.
- Timmerman, I. G., & Emmelkamp, P. M. (2001). The relationship between traumatic experiences, dissociation, and borderline personality pathology among male forensic patients and prisoners. *Journal of Personality Disorders*, 15, 136–149.
- Trull, T. J. (2001). Structural relations between borderline personality disorder features and putative etiological correlates. *Journal of Abnormal Psychology*, 110, 471–481.
- Watson, S., Chilton, R., Fairchild, H., & Whewell, P. (2006). Association between childhood trauma and dissociation among patients with borderline personality disorder. *Australian and New Zealand Journal of Psychiatry*, 40, 478–481.
- Widiger, T. A., & Frances, A. J. (1989). Epidemiology, diagnosis, and comorbidity of borderline personality disorder. In A. Tasman, R. E. Hales, & A. J. Frances (Eds.), *Review of psychiatry* (Vol. 8, pp. 8–24). Washington, DC: American Psychiatric Press.

- Wildgoose, A., Waller, G., Clarke, S., & Reid, A. (2000). Psychiatric symptomatology in borderline and other personality disorders: Dissociation and fragmentation as mediators. *Journal of Nervous and Mental Disease, 188*, 757–763.
- Williams, J., & Broadbent, K. (1986). Autobiographical memory in suicide attempters. *Journal of Abnormal Psychology, 95*, 144–149.
- Zanarini, M. C., Ruser, T. F., Frankenburg, F. R., Hennen, J., & Gunderson, J. G. (2000). Risk factors associated with the dissociative experiences of borderline patients. *Journal of Nervous and Mental Disease, 188*, 26–30.
- Zanarini, M. C., Williams, A. A., Lewis, R. E., Reich, R. B., Vera, S. C., Marino, M. F., et al. (1997). Reported pathological childhood experiences associated with the development of borderline personality disorder. *The American Journal Of Psychiatry, 154*, 1101–1106.
- Zweig-Frank, H., Paris, J., & Guzder, J. (1994). Psychological risk factors for dissociation and self-mutilation in female patients with borderline personality disorder. *Canadian Journal of Psychiatry, 39*, 259–264.

Received May 12, 2008

Revision received May 12, 2008

Accepted April 15, 2009 ■