

The psychodynamics of borderline personality disorder: A view from developmental psychopathology

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Abstract

This article provides a contemporary view of the psychodynamics of borderline personality disorder (BPD) from a developmental psychopathology perspective. We first briefly describe the evolution of the borderline construct in psychoanalysis and psychiatry. Then we provide clinically and empirically informed model of domains of personality function and dysfunction that provides a roadmap for thinking about personality pathology from a developmental psychopathology standpoint and examine the nature and phenomenology of BPD in terms of these domains of functioning. Next, we describe prominent dynamic theories of etiology of BPD and examine these in relation to the available research. Finally, we describe psychodynamic conceptions of treatment and the way BPD phenomena manifest in treatment, followed again by consideration of relevant research, particularly on transference–countertransference constellations empirically identified in the treatment of patients with BPD.

The conceptualization of borderline personality disorder (BPD) has changed significantly over the last 80 years. What emerged from the psychoanalytic literature and remained an exclusively psychoanalytic construct for its first 50 years has metamorphosed into a burgeoning area of empirical research from multiple standpoints. Our goal in this article is to offer a contemporary description of BPD informed by both psychoanalytic clinical theory and observation and by the available research, focusing on the phenomenology, etiology, and treatment of the disorder. We argue that an empirically informed psychodynamic approach is central understanding BPD from a contemporary developmental psychopathology perspective.

Before beginning, we address briefly the question of why one might think about BPD

from a psychodynamic perspective. It is an irony of our times that psychodynamic approaches are disappearing from the academic and therapeutic landscapes just as empirical research has begun to corroborate some of their most important postulates, for example, about the ubiquity of unconscious processes, including implicit affective and motivational processes; the importance of early attachment relationships for subsequent development and psychopathology; the role of personality as a diathesis for many disorders (and the source of much of their comorbidity); and the role of the therapeutic relationship in effecting change in psychotherapy (Westen, 1998b). What dynamic perspectives on BPD have assumed from the start is perhaps the core postulate that unites theory and research in developmental psychopathology: that psychopathology needs to be understood in its developmental context. Nowhere is this postulate more important than in BPD, a malady whose core deficits and dysfunctions are in domains of representation (of the self, others, and relationships) and emotion regulation that normally emerge in the

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context of nurturant attachment relationships and stable family systems. What perhaps continues most to distinguish dynamic approaches to treatment is the use of developmental models in thinking about what needs to be accomplished in helping patients with BPD change. As we shall see, clinical observers framed some important hypotheses about the nature, etiology, and treatment of BPD that have turned out to be not only prescient but important in understanding and treating borderline patients.

The Nature and Phenomenology of BPD

Like the construct of psychopathy (Cleckley, 1941), the construct of BPD emerged from the observation of patients who seemed on the surface to be *compos mentis* (who were not psychotic, and could converse in socially competent ways) but who appeared, on closer examination, to have in some sense only a “mask of sanity.” We first describe the evolution of the construct from its psychoanalytic origins to its current psychiatric definition. We then examine empirical research on the complex pattern of function and dysfunction that constitutes the borderline syndrome.

Evolution of the Borderline Construct

Although the term *borderline* was first introduced in the psychoanalytical literature in the 1930s (e.g., Stern, 1938), it was not until Knight’s (1953) classic article on “borderline states” that the construct began to gain widespread attention. Knight described patients who often had classic neurotic symptoms and intact areas of functioning (e.g., memory and “habitual performances”) but whose inability to form constant and lasting relationships and to adapt to environmental demands were severely impaired. Frosch suggested that borderline patients retain “a relative capacity to test reality, albeit frequently consistent with earlier ego states” (Frosch, 1970, p. 48). This view was echoed in the psychological testing literature, where the aphorism, “clean WAIS [Wechsler Adult Intelligence Scale], dirty Rorschach” reflected the view that borderline patients could function reasonably well with

considerable structure but that their capacity to function adaptively breaks down under conditions of low structure and high emotion. This could be seen, for example, in their tendency to make idiosyncratic and often malevolent attributions, even on such seemingly “structured” tasks as the Picture Arrangement subtest of the WAIS if the tester were to inquire about the story they had in mind while arranging the cards (Nigg, Lohr, Westen, Gold, & Silk, 1992; Segal, Westen, Lohr, & Silk, 1993; Westen, Lohr, Silk, Gold, & Kerber, 1990).

The most important theoretical advance in defining the borderline construct emerged from the work of Kernberg (1975), who proposed that borderline personality organization (BPO) be understood as a middle level of personality organization on a continuum from neurotic to psychotic personality organization. For Kernberg, the hallmarks of BPO (a broader construct than BPD, reflecting a *level* of personality organization or dysfunction, rather than a specific personality disorder [PD]) are distortion in reality perception (as opposed to the genuine loss of contact with reality seen in psychosis); immature and maladaptive defenses (ways of regulating emotion); and an inability to form complex, integrated representations of others, which contributes to interpersonal instability. Kernberg (1975) described borderline patients as having “nonspecific ego weakness” (i.e., multiple deficits in the psychological practices fostering adaptive functioning), including poor impulse control, low anxiety tolerance, and breakthroughs of “primary process” thinking (i.e., disordered thinking). As we shall see, many of these features are, empirically, descriptive of the types of patients he placed under the rubric of BPO.

The decades of the 1970s and 1980s led to an explosion of psychoanalytic theories of the nature, pathogenesis, and treatment of borderline pathology. All of these approaches shared what today we would describe as a developmental psychopathology perspective, understanding the pathology, the pathways to its emergence, and the pathways from BPD to healthier functioning in developmental context. Masterson (1972) developed an object relations approach to borderline pathology, emphasizing the way borderline patients internal-

ize relationship patterns from their interactions with their primary caregivers. He argued that children who go on to develop BPD form representations of others who withdraw or attack in response to their legitimate expressions of needs and affects (e.g., for autonomy, separation, and anger) and subsequently play out many of these relationship paradigms in their adult lives. Adler and Buie (1979) described the deficit in “evocative object constancy” of borderline patients, that is, their inability to self-soothe by drawing on memories, images, or experiences with soothing others. Adler and Buie hypothesized that this deficit emerges from childhood experiences with unempathic, unavailable, or abusive parents, who fail to help their children regulate their affects (and ultimately to learn to do so on their own). As noted below, research on attachment and affect regulation patterns in high-risk children lends some support to these hypotheses, although there is still much to be learned about the kinds of parenting that create specifically borderline pathology (see, e.g., Bradley, Jenei, & Westen, 2005; Cicchetti, Ackerman, & Izard, 1995; Cicchetti & Toth, 2000; Lyons–Ruth, 1996; Lyons–Ruth, Easterbrooks, & Cibelli, 1997; Sroufe, 1989).

With an increasing press to develop reliable criteria for psychiatric syndromes that would allow systematic and replicable research, clinical description began to give way to empirical description of a more precisely delimited clinical syndrome (for an early example, see Grinker, Werble, & Drye, 1968). After reviewing the existing empirical and theoretical literature (Gunderson & Singer, 1975), Gunderson and colleagues developed the Diagnostic Interview for Borderline Patients (Gunderson & Kolb, 1978; Gunderson, Kolb, & Austin, 1981), which led to the first sustained research on BPD. In his role as Chair of the first DSM Personality Disorder Committee, Spitzer and colleagues developed a set of diagnostic characteristics (Spitzer, Endicott, & Gibbon, 1979) that became the basis for the BPD criterion set introduced in 1980 in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* (American Psychiatric Association, 1980). It was at this time that BPD entered the official psychiatric no-

menclature as a specific type of disorder rather than as a level of personality structure or disturbance. Many of the PDs on Axis II of *DSM-III*, including paranoid, schizoid, schizotypal, antisocial, histrionic (and sometimes dependent), also fall under the rubric of BPO as defined by Kernberg (1975). It is interesting that, with the exception of schizoid, all of these PDs show high comorbidity with *DSM* defined BPD, and studies of adaptive functioning tend to find them clustered together on a continuum of personality pathology, with disorders such as avoidant, narcissistic, and obsessive–compulsive generally showing better adaptive functioning (see, e.g., Skodol, Gunderson, McGlashan, et al., 2002; Skodol, Gunderson, Pfohl, et al., 2002; Tyrer, 1996).

Domains of Function and Dysfunction in BPD: An Empirical Portrait

Psychoanalytic theorists have proposed a range of models of personality “structure” (i.e., repetitively activated psychological processes likely to be elicited under specific conditions) that can be useful in organizing existing data on the nature of borderline pathology and particularly in identifying targets of clinical change (see, e.g., Freud, 1933; Gabbard, 2005; Kernberg, 1983; Lenzenweger, Clarkin, Kernberg, & Foelsch, 2001; McWilliams, 1999). In this section we draw on a model of domains of personality functioning designed to integrate psychodynamic clinical models of case formulation with relevant research from personality, clinical, social, developmental, and evolutionary psychology (Heim & Westen, in press; Westen, 1995, 1996, 1998a; Westen, Gabbard, & Blagov, in press). The model suggests that a systematic case formulation must answer six questions, each comprising a series of subquestions or variables. The first three questions are central to personality or character structure, and can help organize the empirical literature on the phenomenology of BPD:

1. What does the person wish for, fear, and value, and to what extent are these motives conscious, conflicting, or mutually compatible? This question addresses both adaptive and maladaptive strivings and conflicts

- among goals, and corresponds roughly to classical psychoanalytic concerns about motivation and conflict (e.g., Brenner, 1982).
2. What are the person's psychological resources for adapting to internal and external demands? This question addresses psychological functions essential to adaptation, including cognitive processes (e.g., intelligence, memory, intactness of thinking processes), emotions, emotion regulation strategies (including both conscious coping strategies and unconscious defenses (see, Westen, Muderrisoglu, Fowler, Shedler, & Koren, 1997), skills, and other aspects of self-regulation (e.g., impulse regulation). It corresponds roughly to ego-psychological approaches to adaptive functioning (e.g., Blanck & Blanck, 1974; Hartmann, 1939/1958).
 3. What is the person's capacity for engaging in intimate relationships, and how does the individual experience the self, others, and relationships? This question addresses psychological functions essential to interpersonal functioning, such as mental representations, social skills, and identity. It corresponds roughly to object-relations, self-psychological, attachment, and relational (Aron, 1996; Mitchell, 1988) approaches to the experience of self in relation to others, and reflects a rich body of developmental literature (see Damon & Hart, 1988; Fonagy, Gergely, Jurist, & Target, 2002; Harter, 1999; Livesley & Bromley, 1973; Main, 1995; Westen, 1990a, 1990b, 1991c, 1994).

From this point of view, individuals with particular PDs are likely to be characterized by distinct constellations of motives and conflicts, deficits in adaptive functioning, and problematic ways of thinking, feeling, and behaving toward themselves and significant others (Heim & Westen, in press). (Elsewhere we address the question of how, and in what ways, this clinically grounded understanding of personality structure relates to personality structure as understood in the trait psychology tradition; Westen et al., in press.)

The remaining three questions focus on symptom presentation, proximal and distal de-

terminants of personality functioning and symptom expression (etiology, current environmental and medical context, and recent stressors), and longitudinal course (prognosis and likely course of treatment):

4. In what ways is the person symptomatic? This question addresses the patient's current symptomatology and history of symptoms as well as the functional elicitors of these symptoms.
5. How did the person's personality and symptoms evolve? This question addresses the question of etiology, and focuses on the person's genetics, developmental history, and their interaction. It also addresses contextual variables (e.g., recent stressors, medical conditions) that may help explain the patient's current symptoms and life circumstances (e.g., functional disability).
6. What is the person's prognosis and likely courses of treatment? This question focuses on the likely course of the person's life course, symptoms, and treatment, including ways the person's personality processes are likely to manifest in the treatment and to influence and interact with the clinicians' dynamics.

We focus in this section on the first three questions, which can be used to organize research on the nature of borderline personality disturbance. The fifth and sixth questions (etiology and treatment) are the focus of the final sections. Because of space limitations, we focus only on passing on the fourth question of symptomatology in patients with BPD (e.g., their vulnerability to mood, anxiety, and substance use disorders), which have been reviewed extensively elsewhere (e.g., Gunderson, 2001).

Wishes, fears, and conflicts

In many respects, the wishes, fears, and conflicts first identified by dynamic clinicians (e.g., fear of abandonment, sensitivity to rejection, and fear of aloneness) continue to define central aspects of the disorder. Patients with BPD are in constant conflict between their desperate need for connection to others and their

fear, mistrust, and anger, which often drives others away. From a dynamic perspective, a failure to develop the capacity for self-soothing means that borderline patients may have to rely on the actual (rather than internalized) presence of another person to manage and tolerate emotions.

Research using the Shedler–Westen Assessment Procedure (SWAP-200) Q-sort provides empirical evidence for this view of BPD. In multiple community samples, the items most descriptive of the personality functioning of patients with BPD include items reflecting abandonment fears, rejection sensitivity, fears of aloneness and three items of direct relevance to dynamic accounts of motivation and conflict in BPD: “is unable to soothe or comfort self when distressed; requires involvement of another person to help regulate affect,” “is simultaneously needy of, and rejecting toward, others (e.g., craves intimacy and caring, but tends to reject it when offered),” and “tends to feel misunderstood, mistreated, or victimized” (Shedler & Westen, 2004; Westen & Shedler, 1999a; Zittel & Westen, 2005). Other research has similarly documented the intense alienation and lack of what Erikson (1962) described as “basic trust” in others in patients with BPD (Bell, Billington, Cicchetti, & Gibbons, 1988).

In a creative use of a cognitive task adapted for research in psychopathology, Korfine and Hooley (2000) examined BPD patients’ response to words associated with the kinds of interpersonal themes described above. They compared the response of patients with BPD to normal controls on a directed forgetting task using words expected to be particularly salient to patients with BPD (e.g., emptiness, enraged, abandoned, evil and reject). As hypothesized, patients with BPD had more difficulty suppressing cognitive processing of words related to their preoccupations.

The characteristic wishes, fears, and conflicts of patients with BPD often lead, through a process Wachtel (1977) calls “cyclical psychodynamics” (by which people often inadvertently elicit precisely what they most fear), to a tendency to experience intense but transient relationships that reinforce these conflicts and concerns. For example, the individual

with BPD may attribute malevolence to, or fear abandonment by, significant others and hence resort to self-harm or threats of suicide that further drive others away. Downey and colleagues (Downey, Freitas, Michaelis, & Khouri, 1998) have documented processes akin to cyclical psychodynamics of this sort in individuals high in rejection sensitivity.

Psychological resources

Individuals with BPD show deficits across a number of domains of adaptive personality functioning. We focus here on cognitive processes, emotion and emotion regulation, and impulse regulation.

Cognition: Subclinical cognitive disturbance. Psychodynamic theorists have consistently argued for distinct cognitive deficits in patients with BPD, particularly involving executive functioning (e.g., ability to plan and maintain focus on goals), the ability to think clearly in the face of strong emotions, paranoia, and general reality testing (or what one might call subclinical cognitive disturbance) (see, e.g., Kernberg, 1975). Neuropsychological studies of BPD are limited. Some show few deficits, perhaps reflecting the “clean WAIS” phenomenon (Kunert, Druce, Sass, & Herpertz, 2003; Sprock, Rader, Kendall, & Yoder, 2000). Others, however, indicate memory deficits, particularly for uncued recall of complex, recently learned information; deficits in attention; and impairment in visuospatial processing (Judd & Ruff, 1993; O’Leary, 2000).

A small group of recent studies indicates that impaired executive neurocognitive functioning may characterize BPD, with degree of impairment associated with degree of borderline symptomatology (e.g., Bazanis et al., 2002; Fertuck, Lenzenweger, Clarkin, Hoermann, & Stanley, in press; Posner et al., 2002). For example, Lenzenweger, Clarkin, Fertuck, and Kernberg (2004) compared patients with BPD to normal controls on tests of sustained attention, visual working memory, and executive functioning as assessed by the Wisconsin Card Sort Task (Heaton, 1981). These studies find impairment of neurocognitive functioning in BPD that is independent of negative or dys-

regulated affect (Depue & Lenzenweger, 2001, 2005), suggesting that even at emotional baseline patients with BPD may show disruption in core cognitive processes (see Fertuck et al., in press, for a review). To what extent these neurocognitive impairments are cause or effect of some of the more widely emphasized emotional disturbances in BPD is at present unknown.

Both phenomenological descriptions and formal diagnostic criteria for BPD include psychotic or psychotic-like cognitive processes, although the nature of these processes has been a matter of debate. This debate can be seen in the evolution of diagnostic criteria since *DSM-III* (see Gunderson, Zanarini, & Kisiel, 1995), which have variously emphasized brief psychotic episodes, paranoia, and dissociative experiences.

Zanarini, Gunderson, and Frankenburg (1990) identified three levels of cognitive impairment in BPD: disturbed but nonpsychotic symptoms such as dissociation, depersonalization, odd thinking, and nondelusional paranoia; quasipsychotic symptoms defined as transient (less than 2 days) and circumscribed (affecting one or two areas in the patient's life) hallucination and delusions; and genuine psychotic thought including prolonged (more than 2 days) and widespread delusions or hallucinations (i.e., Schneiderian first-rank symptoms). Genuine psychotic thought was relatively rare among borderline patients (14%) and always occurred in the context of comorbid Axis I diagnoses. However, the presence of quasipsychotic symptoms distinguished borderline patients from other groups.

In multiple studies using the SWAP-200 Q-sort, the item that has best captured BPD thought disorder has been "tends to become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning" (Shedler & Westen, 2004; Westen & Shedler, 1999a; Zittel, Bradley, & Westen, in press). Heim and Westen (in press) have recently attempted to distinguish the subclinical cognitive disturbances of borderline and schizotypal patients. Although some dimensions of cognitive disturbance were similar across the two groups, patients with BPD showed particular elevations in a dimension indexing problems with judgment,

decision making, and attention that appear primarily under conditions of affective arousal (e.g., "has trouble maintaining focused attention *when distressed*; when emotions are strong, shows a noticeable decline in functioning;" "has difficulty making sensible decisions *when emotions are strong*; tends to be overly swayed by the passion of the moment").

A form of subclinical thought disorder in BPD that can be important with respect to differential diagnosis has been described by Kernberg (1975) in terms of "unmetabolized introjects," by which he means experiences of self in relationship to a caregiver that are encoded concretely rather than as either well-differentiated person representations or abstract moral internalizations. Routine psychiatric interviewing can often confuse these "raw" or psychologically unmetabolized quasiperceptual experiences with genuine hallucinations (e.g., "I hear my mother's voice screaming at me, telling me to kill myself"), even though, with careful probing, patients with BPD (unlikely patients with schizophrenia) are generally able to acknowledge that these quasi-hallucinations are not "real" (e.g., "I know it's not my mother, but it sounds just like her"). For example, when recalling aspects of her relationship with her mother (who was physically and emotionally abusive), one patient would be at a loss for words; instead she would report a physically vivid experience that she described as "worms swimming through my blood." Although she knew there were no actual worms in her body, over time she came to interpret this experience as "what it felt like" being with her mother. Phenomena such as these are similar to phenomena sometimes reported in the literature on psychotic and psychotic-like symptoms in posttraumatic stress disorder (PTSD); (see Morrison, Frame, & Larkin, 2003 for a review) and reflect the often fine line between reexperiencing traumatic memories and hallucinating phenomena that are not present (see, e.g., Beck & Van der Kolk, 1987; Butler, Mueser, Sprock, & Braff, 1996; Read & Argyle, 1999).

Emotional experience and emotion regulation. The *DSM-IV* criteria for BPD include multiple items reflecting aberrant emotional expe-

rience (e.g., intense anger), perhaps most importantly the “affective instability” criterion. This criterion grew out of observations of the intense, fluctuating nature of emotions in patients with BPD. However, this construct itself has shown its share of “fluctuation” over successive editions of the DSM, and its boundary conditions with other axis I conditions, particularly bipolar spectrum disorders, remain uncertain. Researchers and clinicians have long observed the co-occurrence of depression and BPD (e.g., Gunderson & Phillips, 1991) and raised the question of whether borderline personality is better understood as a mood spectrum disorder. Akiskal (1996, 2004), who has long argued for conceptualizing BPD as a mood spectrum disorder, has more recently championed the view of BPD as “soft” bipolar spectrum pathology with extremely rapid cycling.

Although the high prevalence of mood disorders in patients with BPD is indisputable, critics of the bipolar spectrum hypothesis have argued that the affective instability of patients with BPD is qualitatively distinct, in several respects. First, fluctuation in negative but not positive mood seems to characterize borderline patients, as seen in experience sampling studies (Stein, 1996). Second, depressed mood in the context of BPD is marked by loneliness, emptiness, anger, one-sided or “split” representations of the self and significant others, and diffuse negative affectivity (Kurtz & Morey, 1998; Rogers, Widiger, & Krupp, 1995; Westen et al., 1992; Wixom, Ludolph, & Westen, 1993). Third, mood lability in the context of BPD is highly reactive (unlike mood in major depression, for example) and is generally associated with interpersonal sensitivity (Bolton & Gunderson, 1996; Gunderson, 2001).

Aside from depressed mood, borderline personality is related to an increased vulnerability to a range of intensely experienced painful emotional states. Describing “the pain of being borderline,” Zanarini et al. (1998) note that borderline patients report higher levels of dysphoric emotions than nonborderline patients, and that these are often associated with cognitive–affective states such as feeling abandoned, evil, like a small child, or betrayed. In

a recent study from our research group (Westen, Bradley, & Shedler, 2005), we similarly found a range of dysphoric states to be highly characteristic of patients with BPD, such as a tendency to feel misunderstood, mistreated, or victimized or to feel inadequate, inferior, or like a failure. Although these moods did not *distinguish* borderline patients from other PD patients, they tend to characterize their phenomenology on a day to day basis, unlike the more florid signs of distress that empirically distinguish BPD from other disorders but emerge only under extreme emotional and interpersonal stress (e.g., self-harming or suicidal behaviors). Intense negative affect, though not specific to BPD, appears to be a highly stable aspect of the disorder longitudinally (Zanarini, Frankenburg, Hennen, & Silk, 2003).

A construct frequently used in describing patients with BPD is emotional dysregulation (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Westen, 1991c; Westen & Shedler, 1999a, 1999b; Zittel et al., in press). Emotional dysregulation refers to a tendency for negative emotions to spiral out of control, to be expressed in intense and unmodified forms, and/or to overwhelm reasoning. Empirically, emotional dysregulation is probably the most characteristic feature of the disorder as defined in recent editions of the *DSM* (see Shedler & Westen, 2004; Westen, Bradley, et al., 2005; Westen et al., 1997; Westen & Shedler, 1999a). Linehan (1993a) suggests that vulnerability to emotion dysregulation in BPD is characterized by high sensitivity to emotional stimuli, high emotional intensity, and slow return to emotional baseline once emotional arousal has occurred. Related conceptualizations suggest that individuals with BPD have difficulty recognizing, differentiating, and integrating emotions and emotion-laden representations of the self and significant others (e.g., Kernberg, 1975). This inability to process emotional experience may result in global, undifferentiated affective states that do not direct the individual to effective behavioral, coping, or defensive responses and instead elicit a range of desperate escape maneuvers (Krystal, 1974; Linehan & Heard, 1992; Westen, 1991b).

The emotional dysregulation seen in patients with BPD can be understood as a gross failure to engage in normal emotion regulation processes (i.e., conscious and unconscious procedures used to maximize positive and minimize negative emotional states). A number of maladaptive efforts at emotion regulation characterize patients with BPD. Some are behavioral, such as suicidal and self-harming behavior when these reflect efforts to obtain relief from experiences of intolerable or overwhelming emotions (e.g., Kullgren, 1988; Montgomery, Montgomery, Baldwin, & Green, 1989; Yen et al., 2002). BPD is also associated with a number of other maladaptive behaviors likely to serve in part as affect regulation strategies, such as substance use and bulimic episodes (see e.g., Vollrath, Alnaes, & Torgersen, 1996). Aside from failing to engage in the kinds of conscious coping strategies that are one of the major foci of Linehan et al.'s (1991) dialectical behavior therapy, empirically, patients with BPD also engage in many of the maladaptive *implicit* emotion regulation procedures (i.e., defenses; see Westen, 1985; Westen, 1994) long ascribed to them by psychodynamic theorists (see Perry & Cooper, 1987; Westen et al., 1997). Table 1 reproduces the items most descriptive of patients with BPD in a study just completed of emotion regulation and emotional experience in BPD (Zittel et al., in press).

Research using functional neuroimaging (functional magnetic resonance imaging) and other biological procedures to examine emotion and emotional regulation in BPD is just beginning but holds promise in contributing to an understanding of the disorder (and particularly of emotion dysregulation). For example, structural neuroimaging findings indicate decreased amygdala volume in BPD (Driesen et al., 2000; Schmahl et al., 2003). Most functional neuroimaging research begins with the hypothesis that BPD is associated with hyperreactivity to emotional stimuli, which should be manifest in neural responses such as heightened activation of the amygdala (Donegan et al., 2003; Herpertz et al., 2001). The data, however, can be complex because patients with BPD who dissociated may be relatively *less* reactive than patients without

Table 1. *Emotion regulation and emotional experience in BPD*

Has trouble recognizing or remembering anything positive when feeling bad: when things are bad, everything is bad.
Tends to feel unpleasant emotions (sadness, anxiety, guilt, etc.) intensely
Tends to become overwhelmed or disorganized by emotion
Tends to feel sad or unhappy
Tends to ruminate or dwell on concerns when distressed
Tends to feel anxious
Has difficulty seeing other people's perspective when emotions become strong
When distressed, tends to vacillate between clinging to others and pushing them away
Tends to be angry or hostile (regardless of whether this is consciously acknowledged)
Tends to lash out at others when distressed or angry
Tends to become needy, dependent, and clingy when distressed
Is prone to tantrums and angry outbursts when thwarted or frustrated

Note: The data are adapted from Zittel, Bradley, and Westen (in press), using the Affect Regulation and Experience Questionnaire (Westen et al., 1997).

BPD (Schmahl et al., 2004). Although recent efforts are a very useful start, it is important to go beyond studies of neural correlates of known behavioral phenomena (e.g., heightened amygdala activity in response to negative stimuli, the absence of which would might just as readily imply a broken scanner) to research that can either contribute to an understanding of the neural *systems* that are dysfunctional in borderline patients and/or can elucidate the processes underlying phenomena currently understood at a behavioral level. For example, neuroimaging data could lead to better understanding of the nature of the emotionally one-sided "split" mental representations of patients with BPD, by presenting patients with BPD with images or imagery-guided scripts regarding people about whom they have emotionally driven one-dimensional views. One would expect, for example, to see greater relative activation of ventromedial relative to dorsolateral prefrontal activity when patients with BPD describe or think about peo-

ple when their representations are affect driven, particularly if exposed to information counter to their one-sided representation (e.g., information suggesting that the person can be fair or kind).

Impulse regulation. Problems with impulse regulation are reflected in the diagnostic criteria for BPD, and research indicates that degree of impulsivity is predictive of severity of borderline pathology over time (e.g., Links, Heslegrave, & van Reekum, 1999) as well as other clinically important variables, notably suicidal behavior (Soloff, Lis, Kelly, Cornelius, & Ulrich, 1994; Soloff, Lynch, Kelly, Malone, & Mann, 2000). However, impulsivity is a multidimensional construct, with different expressions in different forms of psychopathology (e.g., cognitive impulsivity in attention-deficit/hyperactivity disorder [ADHD], lack of concern about consequences of actions and poor planning in antisocial PD). The precise nature of impulsivity in BPD is not yet fully understood.

For example, borderline impulsivity primarily reflect a difficulty regulating affects, leading to behaviors such as cutting, as opposed to difficulty regulating attention, as in ADHD. A psychodynamic perspective would pose three questions about impulsivity in BPD. First, what motivates impulsive action in BPD (e.g., strong affect states, particular feeling-states such as interpersonal desperation)? Second, to what extent does impulsivity (or different forms of impulsivity) in BPD reflect the extreme affect of patients with BPD that motivates them to act (too much “gas”) or to what extent does it involve deficits in self-regulation or inhibitory control (too little “brakes”)? Third, what is the range of forms impulsive action can take? Regarding this third question, impulsive action in borderline patients is more likely than in other disorders to include self-harm. It is also frequently manifest in bulimic behavior, reckless spending, senseless shoplifting, substance abuse, and so forth. The specific form of behavior may change with the context. One of us (RB) recently worked with a young adult patient who engaged while at college in excessive use of marijuana and reckless sexual behavior. Upon returning to her

parents’ home for breaks, however, she engaged in self-harmful behaviors, such as taking near overdoses of over the counter drugs and cutting herself. All of these behaviors were “impulsive” in the sense that they were not planned and appeared to the patient to come “out of the blue,” but they had different meanings and eliciting situations.

Impulsivity is a multifaceted construct, and a number of research groups have begun to map the relationship between BPD and specific types of impulsivity. Lenzenweger and colleagues focus on low levels of nonaffective constraint (the capacity to inhibit thought or action) associated with BPD, which they have associated empirically with diminished ability to perform cognitive tasks that rely upon effortful (conscious) cognitive processing (Hoermann, Clarkin, Levy, & Hull, 2005; Lenzenweger et al., 2004). Another form of impulsivity that has received considerable research is what has been described as impulsive aggression, including aggression toward both the self and others. Research suggests that serotonin dysfunction leads to a baseline of impulsivity that interacts with contextual cues leading to aggressive behaviors (Coccaro et al., 1989; Seroczynski, Bergeman, & Coccaro, 1999; Skodol, Siever, et al., 2002). For example, some research links lower levels of 5-hydroxytryptophan (5-HTT) with increased self-harmful and suicidal behaviors (e.g., Mann, 1998). Other research, however, suggests that impulsivity may not necessarily be linked to aggression in all or most patients with BPD (e.g., Critchfield, Levy, & Clarkin, 2004; Depue & Lenzenweger, 2001).

Westen, Heim, and colleagues have also begun examining the multidimensional nature of impulsivity using an Impulsivity Questionnaire (Westen & Heim, 2005) designed for use by clinically experienced informants, based on either their knowledge of the patient over the course of treatment or a systematic, narrative-based clinical interview, the Clinical Diagnostic Interview (Westen, 2004; Westen & Muderrisoglu, 2003, in press). Factor analysis of the instrument yields five dimensions: cognitive impulsivity (e.g., “has difficulty concentrating or maintaining focus on tasks or problems, even when mood is rela-

tively calm”), impulsive aggression (e.g., “is prone to angry outbursts or temper tantrums in response to interpersonal disappointments or frustrations”), self-destructive impulsivity (e.g., “engages in potentially dangerous sexual behavior, such as unprotected sex”), antisocial impulsivity (e.g., “commits crimes or antisocial acts that seem senseless” (e.g., “kleptomania, fire-setting”), and emotional impulsivity (e.g., “has difficulty tolerating unpleasant feelings; acts quickly to escape them, even when the consequences are potentially harmful”). Empirically, items with the highest correlations with dimensional BPD diagnosis (number of *DSM-IV* BPD symptoms met) include (but are not limited to) “is prone to angry outbursts or temper tantrums in response to interpersonal disappointments or frustrations,” “has difficulty tolerating unpleasant feelings; acts quickly to escape them, even when the consequences are potentially harmful,” “becomes actively suicidal (including formulating or carrying out a plan) when upset or angry,” “has difficulty inhibiting aggression when provoked, even when doing so would be in own interest,” and “expresses guilt, shame, or remorse after behaving badly, but cannot use these emotions to refrain from acting.”

Experience of self, others, and relationships

The third broad domain of functioning that defines a psychodynamic formulation of personality dynamics regards the person’s experience of self, others, and relationships. Here we address three areas of theory and research regarding BPD: disturbances in self and identity, object relations, and attachment.

Self and identity. The term self and its derivatives (e.g., self-concept, self-esteem) has multiple, often confounded meanings in psychology. In general, however, one can distinguish several distinct domains of self and identity (Westen, 1992), all of which are clinically relevant, particularly for understanding PDs (Westen & Cohen, 1993; Westen & Heim, 2003). These include self-representations (implicit and explicit views of self, activated under various conditions); coherence of sense of self (i.e., sense of agency and continuity

through time); self-esteem (specific and global feelings about the self); self-esteem regulation (ability to maintain relative constancy to feelings about the self, despite momentary situational changes); feared, wished for, and ideal self-representations that serve as standards or guides for behavior (Higgins, 1990); and what Erikson (1986) referred to as identity, which includes the sense of self, representations of self, the recognition of one’s selfhood by the social milieu, and an emotional weighting of elements of self (such as roles) the person experiences as self-defining. Individuals with BPD show disturbances in each of these domains (see Wilkinson–Ryan & Westen, 2000).

From a psychodynamic perspective, a hallmark of BPD is a lack of integration of self-representations (Kernberg, 1976, 1983). In particular, patients with BPD have difficulty integrating self-representations with differing affective qualities (i.e., good and bad). A common example is an inability to hold in mind representations of self as both angry and loving (and, conversely, of self as lovable when significant others are angry). This results in sharp discontinuities in self-representations from day to day or moment to moment. At times this appears to reflect a deficit in the capacity to regulate the influence of mood on cognition, whereas at others, it may reflect a defensive maneuver (e.g., representing the self as unlovable to avoid the even more intolerable representation of the other as unloving). As described below, similar shifts occur in representations of others. The actions of a significant other may result in a representation of self as victim in the face of a callous, malevolent, or indifferent relational world.

Recent research using the SWAP-200 Q-sort (and the more recent SWAP-II Q-sort) suggests that the self-representations of patients with BPD, like their wishes, fears, and conflicts, center on a view of self as inadequate, unlovable, and undeserving (Westen, Bradley, et al., 2005). These representations are captured in items such as “tends to feel s/he is inadequate, inferior, or a failure,” “tends to feel helpless, powerless, or at the mercy of forces outside his/her control,” “tends to feel misunderstood, mistreated, or victimized,” and “tends to feel like an outsider.” Zanarini and

colleagues (1998) have captured similar themes in their work on “the pain of being borderline.”

As these comments suggest, self-esteem in borderline patients often fluctuates to extremes, particularly negative extremes. Whether, as asserted by some clinical theorists, those extremes can include defensive grandiosity, is unclear. However, baseline self-esteem in borderline patients is usually very low. Patients with borderline pathology often view themselves as permanently damaged, evil, or rotten to the core (Zittel & Westen, 2005). Self-esteem in BPD also fluctuates more from day to day than self-esteem in other patient groups who are also characterized by high levels of negative affect and poor self-esteem, such as chronically depressed or dysthymic individuals (see e.g., Tolpin, Gunthert, Cohen, & O’Neill, 2004). This is not surprising given BPD patients’ vulnerability to affective dysregulation and inconstant representations.

With respect to the *sense of self* (sense of continuity over time, and sense of agency), clinical observers have long noted the difficulty patients with BPD experience in creating a coherent “self-narrative” that weaves together past, present, and future (see Westen & Cohen, 1993). Autobiographical memories in patients with BPD often include large gaps and disjunctions, leaving the patient without a sense of continuity over time. The mood-dependent nature of BPD representations also renders a sense of continuity difficult. Further, because BPD is often associated with difficulty sustaining relationships over time, important memories or life experiences often involve relationships with others who are no longer in the patient’s life, leaving an experience of self as empty, missing something or someone, or transient (see Westen & Cohen, 1993).

The sense of self as coherent and continuous across time is also interrupted by dissociative experiences. Dissociation refers most broadly to a divided psychological awareness, in which experience is compartmentalized and the person’s connection to his or her own thoughts, feelings, body, or perceptions are diminished (Spiegel & Cardena, 1991; van der Kolk, van der Hart, & Marmar, 1996). Disso-

ciation is often understood as a defensive flight from overwhelming and intolerable experiences and their attendant affect states. Empirically, BPD is associated with a tendency to dissociate (see Gershuny & Thayer, 1999), and dissociation is now a component of one of the diagnostic criteria for the disorder.

Another aspect of the sense of self is the sense of agency. Experience of self as agentic is often disrupted in borderline personality by a pattern in which impulses are acted upon so immediately that the self is not experience as the author of the act. Borderline patients often react so irrationally or unpredictably in the face of intense, negative emotions that they feel unable to make sense of or explain their behaviors (e.g., self-harm or binge eating). A sense of agency is frequently disrupted by experiences of sexual abuse as well (Westen, 1993), which are common among patients with BPD.

The broadest construct related to self in BPD is the construct of identity or identity diffusion (Clarkin, Kernberg, & Somavia, 1998; Kernberg, 1983; Westen & Cohen, 1993). Identity is an overarching construct that includes many of the aspects of self that are discussed above. Theorists have proposed a number of conceptualizations of identity and identity disturbance in BPD. Some emphasize the borderline patient’s experience of a lack of self cohesion, as seen in Adler and Buie’s (1979) description of borderline patients’ fears of “fragmentation,” “falling apart,” or “disappearing.” One patient described a feeling that her body was made of cracked glass that would crumble at the slightest sense of abandonment, which she described as like a “hammer.” Theorists often link these experiences to a failure to internalize characteristics of primary caretakers that normally form the building blocks of identity.

Akhtar (1984, 1992) summarized six central features of identity diffusion as described by Kernberg (1975): *contradictory character traits* are significant contradictions in behavior, perceptions of self, or vocational interests; *temporal discontinuity of the self* is a failure to experience the self as continuous through time; *lack of authenticity* manifests in a tendency to take on the characteristics of others and a

chameleon-like tendency to change one's personality in different situations; *feelings of emptiness* reflect the absence of consistent, internal representation; *gender dysphoria* includes confusion about gender identification and sexual orientation; and *inordinate ethnic and moral relativism* refers to an absence of a stable set of values and a tendency for beliefs and values to change in accord with those of a social group. Akhtar (1992) added a seventh feature, *disturbances in body image*.

Wilkinson-Ryan and Westen (2000) investigated identity disturbance in borderline personality empirically, applying factor analysis to an Identity Questionnaire designed for use by clinically experienced informants (much like the Impulsivity Questionnaire described above) derived from the relevant clinical, theoretical, and empirical literatures and intended to be used by clinical experienced observers. Factor analysis suggested that identity disturbance is a multidimensional construct, and yielded four factors. *Role absorption* refers to a tendency to define oneself in terms of a single role, label, or reference groups, and includes items such as, "identity seems to revolve around a 'cause' or shifting causes," and "defines self in terms of a label that provides sense of identity." *Painful incoherence* includes items such as "patient tends to feel like a 'false self' whose social persona does not match inner experience." *Inconsistency* refers to objective inconsistency in behavior and attitudes that would make any coherent rendering of who one is difficult, includes items such as, "beliefs and actions often seem grossly contradictory (e.g., espouses conservative sexual values while behaving promiscuously)." *Lack of commitment* describes a dimension in which the person has trouble committing to values, goals, ideals, and ideal self-standards, including items such as, "patient has had difficulty choosing and committing to an occupation." Although all four factors distinguished patients with BPD from comparison patients, the most distinctively borderline was painful incoherence (the subjective distress associated with a sense of lack of coherence). Similar factors emerged in a study just completed with adolescent patients (Betan & Westen, 2005).

Object relations

The term *object relations* in psychoanalysis refers to the cognitive, affective, and motivational processes that underlie functioning in close relationships (Westen, 1991c). Object relations approaches to psychopathology highlight the primary need for human relatedness that begins in infancy and emphasize the potential impact of adverse relational experiences on subsequent development (see St. Clair, 2000). According to most object relations theorists, relationships with others, beginning with the mother-infant relationship, form the scaffolding for development. Experiences in relationships become internalized such that the child eventually develops not only capacities for self-regulation, moral judgment, and so forth but also representations of self, significant others, and relationships (often called "internal objects" or "object representations"). These internalized representations (both conscious and unconscious) form the initial templates for the experience of self in relation to others across the life span.

Broadly speaking, psychoanalytic theorists have emphasized three aspects of borderline object relations. First, patients with BPD have deficits in the capacity to develop and maintain complex, constant representations of people's mental states and intentions. As noted above, they tend to "split" their representations into good and bad, and often cannot remember in one mood state how they experienced significant others in another mood state (Kernberg, 1975). They also frequently get confused about whose thoughts and feelings are whose; that is, their representations have poor or fluid "boundaries." Second, patients with BPD tend to fear rejection, abandonment, and mistreatment in intimate relationships, often making malevolent attributions of others' intentions. This in turn frequently precipitates precisely the abandonment or mistreatment they fear. Third, and as a result of these first two problems, patients with BPD have difficulty forming and maintaining lasting intimate relationships. In all of these assertions, clinical observation has been borne out by subsequent research.

Initial empirical studies of object relations in borderline patients focused on Rorschach

data, largely using Blatt, Brenneis, Schimek, and Glick's (1976) measure of object relations, which codes various qualities of human figures perceived on the Rorschach (e.g., complexity and differentiation). Blatt's measure also yields an overall level of developmental maturity of percepts of human figures. As would be predicated by psychodynamic theories, patients with BPD score higher on developmental level than schizophrenia patients and lower than patients with nonpsychotic conditions such as major depression (e.g., Gartner, Hurt, & Gartner, 1989; Spear & Sugarman, 1984; Stuart, Westen, Lohr, Benjamin, et al., 1990). Later projective studies comparing BPD with a range of patients using a range of different forms of projective material have supported many long-held clinical views about the object relations of borderline patients, such as their difficulty forming well-bounded, differentiated representations (Blais, Hilsenroth, Fowler, & Conboy, 1999; Diguer et al., 2004; Fowler, Hilsenroth, & Nolan, 2000; Greene, 1996; Leichsenring, 2004).

Other researchers have studied borderline object relations using measures developed by Westen and colleagues' for assessing dimensions of object relations from narrative data, such as clinical interviews, early memories, and Thematic Apperception Test (TAT) responses (see Westen, 1991a). These measures distinguish several dimensions of object relations and social cognition, derived from both object relations theory and research on developmental social cognition: complexity of representations, affect tone of representations (the tendency to attribute malevolence or benevolence to other people), understanding of social causality (accuracy of attributions and ability to provide coherent narratives in which people's actions logically flow from realistically perceived intentions), emotional investment in relationships (tendency to view others in need-gratifying ways or to experience them as independent people with their own needs and concerns), and emotional investment in values and moral standards. (Later versions of this scoring system include additional dimensions of self-esteem, management of aggressive impulses, and identity and coherence of sense of self; see, e.g., Acker-

man, Hilsenroth, Clemence, Weatherill, & Fowler, 2000)

In general, both adolescent and adult patients with BPD tend to show distinct patterns of response on all these dimensions in relation to a range of comparison groups, such as major depressives and other PDs (Westen, 1991a, 1991c; Westen, Lohr, et al., 1990). The most robust findings have emerged for the affect-tone dimension, in which patients with BPD show substantially more malevolent representations of relationships than any other group studied. These malevolent representations appear to reflect in part a tendency to assimilate current people and relationships too readily to prototypes from the past. Nigg, Silk, Westen, et al. (1991) found that a history of sexual abuse in borderline patients was associated with particularly malevolent early memories, including representations involving deliberate injury (even though most of these were not sexual memories). These results may be related to recent neuroimaging findings that patients with BPD show increased amygdala response to faces other individuals perceive as neutral (Donegan et al., 2003). As hypothesized clinically, BPD is also associated with a lower capacity for emotional investment in relationships (i.e., a tendency to focus on the gratification, security, or benefits others provide) and in values and moral standards (e.g., poorly integrated standards for the self, failure to internalize and integrate value systems).

An additional deficit that has replicated across studies is in the understanding of social causality, reflected in both the tendency to attribute unlikely intentions or motivations to others and to have difficulty providing coherent narratives. This finding is consistent with results from studies using the Adult Attachment Interview (AAI; Main & Goldwyn, 1985) on individuals classified as "unresolved with respect to loss or trauma," who tend to have many borderline features (Fonagy, Target, & Gergely, 2000; Fonagy, Target, Gergely, Allen, & Bateman, 2003). "Unresolved" individuals show problems with meta-cognitive monitoring while trying to provide narratives; that is, they have difficulty recognizing when their narratives are difficult to follow or are inconstant or contradictory.

Some of the most interesting findings vis-à-vis borderline object relations pertain to the complexity and differentiation of representations of people, that is, whether individuals with BPD can maintain coherent, complex, emotionally multivalenced representations of the self and others. On the one hand, results have consistently demonstrated that patients with BPD do tend to represent others' internal states with less complexity and differentiation than patients with other disorders such as major depression and, indeed, they do tend to split their representations by affective valence (good and bad; see Baker, Silk, Westen, Nigg, & Lohr, 1992; Westen, Lohr, et al., 1990). These findings, along with the findings on social causality, are highly consistent with more recent research from an attachment perspective (reviewed below) on failures of "mentalization" in BPD (Fonagy et al., 2000).

On the other hand, several studies using Rorschach, TAT, and other narrative data indicate that borderline patients sometimes show *hypercomplex* representations. These representations are uniformly malevolent and idiosyncratically elaborated, often tinged with psychotic or paranoid thinking (Stuart et al., 1990; Westen, Lohr, et al., 1990; Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990). Theoretically and clinically, these data suggest a phenomenon of *complex* affect-driven thinking, or what might be called "complex splitting," in which patients with BPD can produce highly elaborate representations whose elaboration is motivated by their malevolent interpretation of the other person's motives. Interestingly, researchers studying motivated reasoning in normal children find that cognitive complexity is often as high or higher in motivated reasoning (e.g., when students are confronted with information threatening to their religious beliefs), as they generate complex rationalizations for their beliefs (Klaczynski & Narasimham, 1998).

Attachment

Attachment theory (Bowlby, 1969, 1973) has provided a framework for some of the most important contemporary research related to the psychodynamics, and particularly the object

relations, of BPD (see Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004, for a meta-analytical review). Research on attachment in BPD focuses on the experience of unpredictable, frightening, and/or abusive caregiving, which contributes to an inability to form coherent internal working models of relationships. As a result, the growing child (and later the borderline adult) has difficulty predicting, understanding, and hence optimally adapting to significant others (Lyons-Ruth & Jacobvitz, 1999; Main, Kaplan, & Cassidy, 1985).

The attachment patterns linked most strongly to BPD are the disorganized-disoriented pattern in infancy and the "unresolved" dimension in adulthood. The disorganized pattern in infancy is marked in laboratory studies by infants' incoherent and ineffective attempts to self-regulate following a separation from a caregiver. Instead, infants manifesting this style demonstrate seemingly undirected or contradictory behavior, such as freezing, rocking, or head banging. From an attachment perspective, disorganized attachment patterns emerge when a child is faced with an irresolvable dilemma. Separation from a caregiver causes the infant to become distressed, which activates proximity seeking behavior. However, because the caregiver is unavailable, unpredictable, or frightening, the infant is simultaneously motivated to avoid rather than approach and cannot find a coherent strategy for either understanding or eliciting security.

Research on disorganized attachment yields strikingly similar results to studies of object relations in borderline adolescents and adults. In one series of studies, children with disorganized attachment were more likely to respond to pictures of distressed children separated from their parents with stories depicting violent harm to the child or others (Kaplan, 1987; Main et al., 1985). In other studies, parents are described as unavailable, frightening, or frightened (Solomon, George, & De Jong, 1995), and dolls representing the child engage in angry/violent and idiosyncratic/odd behavior (Cassidy, 1988). Research using the AAI also finds that parents categorized as unresolved with respect to loss and trauma are more likely to have disorga-

nized children (for a recent meta-analytical review, see van Ijzendoorn, Schuengel, & Bakermans–Kranenburg, 1999).

Because “unresolved” is a qualifier rather than one of the three primary attachment patterns coded categorically from the AAI, the most common attachment pattern associated with BPD is preoccupied (analogous to anxious/ambivalent in infancy and childhood). A combination of unresolved and preoccupied attachment has been associated with BPD in adolescents as well (Nakash–Eisikovits, Dutra, & Westen, 2002; Westen, Nakash, Thomas, & Bradley, in press). In general, the combination of preoccupied attachment, often alloyed with a classification of unresolved with respect to loss or trauma, resembles the interpersonal style of patients with BPD, marked by rejection sensitivity, alternation between anxious preoccupation and anger with attachment figures, and incoherent strategies for attempting to make intimate contact with others.

Using attachment theory as a framework, Fonagy and colleagues propose a model of BPD with an emphasis on the development of the capacity for mentalization (e.g., Fonagy et al., 2000). Mentalization, or reflective function, refers to the ability to make sense of one’s own and others’ actions by reflecting on and understanding one’s own and others’ mental states (e.g., feelings, beliefs, wishes, ideas). In other words, mentalization refers to the ability to enter imaginatively into another person’s mind. In healthy development, this capacity emerges in the context of attachment relationships with primary caregivers. As caregivers respond to children, they both observe and mirror the child’s mental (and particularly emotional) states and allow the child to explore the mind of the caregiver. This helps the child elaborate an understanding of his or her own mind and provides important information about the mental states of other people. A failure to develop reflective functioning leaves individuals with a tacit belief in the one to one correspondence between their own perceptions (e.g., of others’ feelings and motives) and reality and a concomitant inability to consider alternate interpretations of why people do what they are doing.

Etiology of Borderline Psychodynamics

Since the origins of the borderline diagnosis, psychoanalytic clinical theorists have speculated about the etiology of the disorder. Although some have emphasized temperamental factors (particularly high levels of aggression), all models share an emphasis on childhood experiences, particularly in primary attachment relationships, that fall outside the “average expectable environment” (Hartmann, 1939/1958) that the human (social) brain evolved to “expect.” We first briefly review some of these models, many of which we touched on above, and which were grounded primarily in clinical observation of children, adolescents, and adults. We then turn to the available empirical evidence.

Theories of Etiology

Kernberg (1975) presented one of the first theories of the pathogenesis of borderline pathology. He proposed that borderline phenomena follow from a failure to integrate representations of good and bad aspects of the self and others. According to Kernberg, as a result of excessive negative feelings (particularly aggression) reflecting temperament, severe environmental frustrations, or both, memories of good and bad experiences with significant others are stored separately, by affective valence. Children who later develop borderline character structure are faced with a dilemma. On the one hand, they want to hold onto their “good” representations, and hence work hard to ward off any association with negative feelings. However, these “good” introjects are constantly threatened with rage and hostile impulses. Thus, for Kernberg, a normative characteristic of all young children becomes, in individuals with emerging borderline character structure, a motivated effort to protect “good” object representations (i.e., a defense).

The work of another theorist, Heinz Kohut, focused mostly on narcissistic pathology but had implications for borderline development elaborated by other theorists. Kohut (1977) argued that children develop a coherent sense of self and a capacity to regulate self-esteem and emotion through “transmuting internaliza-

tions” of soothing and mirroring functions of early caregivers. In other words, optimal development requires that that children experience their parents as both admiring (building self-esteem) and admirable (so they can identify with them and develop ideal-self standards). Like most psychoanalytic theorists, Kohut argued that children essentially need “good-enough mothering” (Winnicott, 1953), that is, emotionally attuned but by no means perfect caretaking to develop. Indeed, Kohut argued that minor empathic failures on the part of parents are part of what impels children to internalize functions previously carried out by the parents.

Adler and Buie (Adler, 1981, 1989; Adler & Buie, 1979; Buie & Adler, 1982) applied Kohut’s constructs to BPD. They argued that borderline patients have a deficit in the capacity to evoke memories of “good objects” to provide self-soothing in times of distress. The capacity to hold onto comforting images of others (e.g., the mother’s smiling face, unalloyed with fear, sadness, anger, or reproach) is a central step toward developing the capacity to self-soothe. Unlike Kernberg, who viewed splitting as a defensive maneuver to avoid an object-relational *conflict* (between loving and hating one’s primary caregiver), Kohut emphasized *deficits* in self-esteem regulation reflecting parenting failures in which conflict and defense are involved only secondarily. As we have suggested above, it is likely that both are true: patients with BPD have trouble integrating representations because of a deficit in the capacity to do so and because doing so may have emotional ramifications (e.g., as when patients do not want to recognize the flaws in an idealized parent who failed to protect them from their highly disturbed or abusive other parent).

According to Masterson (1976), borderline dynamics develop in a relationship with a caregiver who has her own tremendous difficulties with separation and emotion regulation, who needs her child to stave off her own abandonment fears and provide her with a sense of security. The child’s normal autonomous strivings, negativism, or efforts to push the caregiver away while angry are extremely threatening to a caregiver who herself is vul-

nerable to rejection and abandonment. The caregiver’s implicit and explicit responses to the child’s desires for autonomy and expression of anger, and more general misattunement with the child and focus on her own needs and emotions, may lead the child to develop a “false self” based more on the caretaker’s needs than on his or her own. To put it another way, instead of getting reflected appraisals of (and help soothing) their own emotional states, children of primary caregivers who themselves have borderline dynamics often have their feelings and emotions mislabeled and understood idiosyncratically and egocentrically by their primary caregivers. They thus develop deficits in emotional understanding, sense of self, reflective function, and understanding of social causality. Further, according to Masterson, because the primary caregivers of borderline patients often have tremendous fears of abandonment of their own, they may use their children as transitional objects (Winnicott, 1953) who provide them with a sense of security, leading to the kind of role-reversed relationships often seen between patients with BPD and their parents (Shapiro, 1978, 1982). In response to repeated threats of abandonment by an early caregiver who cannot tolerate her young child’s autonomy or feelings, individuals with BPD become vulnerable to “abandonment depression,” reflecting their belief that their “very existence depends on the presence of a need-gratifying and life sustaining other” (Klein, 1989, p. 36).

Attachment theorists have also made a number of hypotheses about the etiology of severe character pathology including BPD (see Fonagy et al., 2000). Freud and Burlingham (1944), Spitz (1956), and others observed infants who were orphaned during World War II or spent their early years in orphanages and recognized an association between disrupted attachments in childhood and subsequent deficits in the ability to form lasting relationships. Bowlby (1969, 1973, 1980) relied on these observational studies and other experimental and naturalistic data to integrate psychoanalytic theory with ethology in the development of attachment theory. From an attachment perspective, disrupted attachments and emotionally misattuned, threatening, unstable, or unpredictable

caregivers provide fertile soil for the development of incoherent (disorganized) internal working models, basic mistrust (Erikson, 1962) toward others, the kind of global, negative views of self characteristic of many patients with BPD.

Empirical Data on the Etiology of Borderline Psychodynamics

Like observations of the phenomenology and dynamics of patients with BPD, many clinical hypotheses about etiology have proven surprisingly robust in the face of empirical scrutiny. We cannot review all the relevant literature here (for an excellent review, see Judd & McGlashan, 2003). However, we will describe the etiological variables that appear to contribute most substantially to borderline psychodynamics. We then describe some of the empirical and theoretical limitations of clinically derived etiologic hypotheses about BPD as the field has come to learn more about genes, childhood experiences, and their interaction.

Testing and refining clinical hypotheses

Consistent with clinical hypotheses, disrupted attachments in childhood have shown an association with BPD. A meta-analytic review found that 20–40% of patients with BPD experienced traumatic separations from one or both parents in childhood (Gunderson & Sabo, 1993). Childhood histories involving lengthy separations from, or permanent loss of, one or both parents differentiate patients with BPD from patients with schizophrenia, depression, and other PDs (Akiskal et al., 1985; Bradley, 1979; Frank & Paris, 1981; Goldberg, Mann, Wise, & Segall, 1985; Gunderson, Kerr, & Englund, 1980; Links, Steiner, Offord, & Eppel, 1988; Paris, Nowlis, & Brown, 1988; Soloff & Millward, 1983; Zanarini, Gunderson, Marino, Schwartz, & Frankenburg, 1989). However, the circumstances and psychological meaning surrounding separation from a parent may play as important a role as the fact of the separation itself. For example, a classic study of depression by Harris, Brown, and

Bifulco (1986) found a constellation of symptoms resembling BPD to be highly prevalent among patients who had a specific kind of “aberrant” separation in childhood, in which the mother appeared to have left her children for months or years with no “socially acceptable” reason. To what extent the damage is done by the separation per se or by the instability or object-relational deficits of the mothers in these cases is unknown.

Although the available research casts doubt on Masterson and Rinsley’s (1975) hypothesis that the mothers of most patients with BPD themselves have BPD (Links et al., 1988), the limited available evidence suggests substantial pathology of object relations and attachment in the childhood caregivers of patients with BPD, including BPD spectrum pathology (e.g., Salzman, Salzman, & Wolfson, 1997). Demonstrating causation is of course difficult because of the likelihood of genetic as well as environmental effects of parental pathology. However, several studies linked problematic parenting and parental bonding with BPD (Frank & Hoffman, 1986; Johnson et al., 2001; Paris, 2003; Paris & Frank, 1989; Russ, Heim, & Westen, 2003; Soloff & Millward, 1983; Walsh, 1977; Young & Gunderson, 1995)

Lyons–Ruth, Yellin, Melnick, and Atwood (2005) are just beginning to analyze data on the first prospective study of the development of BPD from infancy, examining the relation between videotaped interactions between infants and their mothers in a high-risk sample and the child’s Axis II symptoms in adolescence and early adulthood. Of particular interest is a significant association ($r = .31$) between disrupted maternal communication with the child in infancy (e.g., frightening behavior, misattuned emotional responding, role-reversal involving seeking comfort from the infant) and number of borderline symptoms in late adolescence. Supporting Masterson and Rinsley’s (1975) notion of maternal withdrawal from the child as central to creating borderline dynamics, Lyons–Ruth and colleagues found a particularly strong correlation ($r = .42$) between inappropriate maternal withdrawal from her infant and borderline symptoms in her child years later.

Also of relevance is the finding by Fonagy and colleagues (Fonagy, Steele, & Steele, 1991) that parents whose AAI narratives demonstrate a low capacity for mentalizing are likely to have insecurely attached children. Recent findings by Kim-Cohen, Caspi, Rutter, Thomas, and Moffitt (2005) suggest that maternal antisocial traits incrementally predict depression in the offspring of depressed mothers, after controlling for the deleterious effects of the mother's depression. Given that antisocial PD is highly comorbid with BPD in women, and that in this sample women with antisocial traits also tend to have a history of suicidality (Kim-Cohen et al., 2005), there is some reason to believe that these findings may partially reflect maternal borderline traits. Macfie, Houts, McElwain, and Cox (2005) are currently pursuing research on the parenting practices and child outcomes of children of mothers with BPD directly.

Aside from early attachment disruptions, a variable that has shown clear associations with BPD is childhood abuse. Stern's (1938) original description noted that "actual cruelty, neglect, and brutality by the parents of many years' duration are factors found in these patients. These factors operate more or less constantly over many years from earliest childhood. They are not single experiences" (p. 470). However, childhood abuse was not considered in most psychodynamic theories of BPD until its "rediscovery" 50 years later. Numerous studies now identify a link between abuse, particularly childhood sexual abuse, and BPD (see, e.g., Herman, Perry, & Van der Kolk, 1989; Ogata et al., 1990; Silk, Lohr, Ogata, & Westen, 1990; Westen, Ludolph, Misle, Ruffins, & Block, 1990; Zanarini, 1997). Aside from presence/absence of abuse, several studies suggest that characteristics of abuse including severity, age of onset, number of types of abuse experienced contribute to degree of impairment related to borderline pathology (McLean & Gallop, 2003; Silk, Lee, Hill, & Lohr, 1995; Yen et al., 2002; Zanarini et al., 2002).

More broadly, an unstable, nonnurturing family environment appears to contribute to the development of BPD. In adolescent patients, for example, the tendency to misunder-

stand people's actions and intentions (poor understanding of social causality) characteristic of BPD shows a strong association (around $r = .50$) with a simple metric of family instability, namely the number of times the family moved (Westen, Ludolph, Block, Wixom, & Wiss, 1990). Much of the literature on traumatic precursors to PDs (and other psychiatric symptoms, such as depression) has not taken into account the impact of family environment, making it difficult to disentangle the impact sexual or physical abuse from the overall family context within which abuse typically occurs, such as family chaos, disrupted attachments, multiple caregivers, parental neglect, alcoholism, and/or evidence of affective instability among family members (Dahl, 1995; Gunderson & Phillips, 1991; Ogata et al., 1990). Multiple studies of adverse childhood events have linked the number of such events to multiple poor medical and psychiatric outcomes (Dong et al., 2004; Edwards, Holden, Anda, & Felitti, 2003). Studies that have considered several of these variables together in the etiology of PDs have often found that the context within which abuse occurs (e.g., problematic attachment relationships, emotional abuse, and neglect) is as strongly associated with BPD as the presence or absence of physical or sexual abuse (Johnson et al., 2001; Ludolph et al., 1990; Zanarini et al., 1989). For example, a recent study of the relationship between childhood abuse, family environment, and BPD found that family environment partially mediated the relationship between abuse and level of BPD symptoms (Bradley, Jenei, et al., 2005), although abuse showed a substantial unmediated relation to BPD. In other words, sexual trauma predicted BPD, but part of its effect reflected the effects of an unstable, nonnurturing family environment.

Limitations to clinical hypotheses about the etiology of BPD

Although many clinical hypotheses about the etiology of borderline dynamics have obtained empirical support, their limitations are also worth noting. Psychoanalytic theorists traditionally assumed that pathology recapitulates ontogeny: that is, different levels of

personality disturbance lie on a developmental continuum (see Westen, 1989, 1990b). In other words, the earlier the etiological insult, the more severe the pathology is likely to be. Because borderline pathology is less severe than psychotic but more severe than neurotic pathology, and Freud linked the latter to the “oedipal” years (age 4–5), that left the postinfancy “preoedipal” (toddler) years as the focus of theories of the etiology of BPD. Thus, BPD was often understood as a fixation or regression to preoedipal experience.

The fixation/regression concept is not completely without merit. Winnicott (1953) proposed that transitional objects (such as teddy bears) in normative development give infants and toddlers a concrete “object” that can help them self-soothe in the absence of the caregiver. According to Winnicott, such objects represent a transition toward the development of “internalized objects” that can be drawn upon for comfort or security. Supportive of Adler and Buie’s (1979) hypothesis about the failure of evocative object constancy in BPD, a number of studies find that BPD is in fact associated with the use of transitional objects in adulthood (Cardasis, Hochman, & Silk, 1997).

The focus on the toddler and preschool years is sensible in other respects as well. Preschool children have difficulty with impulse regulation and emotion regulation, have trouble maintaining constant representations (e.g., screaming “Daddy, I don’t love you anymore” when Daddy refuses to give them a candy bar), have a need-gratifying approach to relationships, and rely on others for crucial functions such as self-soothing. However, they do not have other hallmarks of the disorder, such as a bias toward hostile attributions or a tendency toward self-mutilation and dissociation.

Indeed, the focus on the preschool years, although linking borderline pathology to normative developmental phenomena, was in one sense too late and in another too early. On the one hand, the patterns of maternal misattunement that produce disorganized–disoriented attachment styles can already be observed in infant–mother interactions by 12–18 months (see Lyons–Ruth et al., 1997), prior to the years linked by many theorists (e.g., Mahler, Pine, & Bergman, 1975) to BPD. On the other

hand, much of the sexual abuse that appears to contribute to the development of BPD occurs long after the preoedipal years and appears to be associated with some of the hallmarks of borderline psychodynamics, such as malevolent representations of people. It may make more sense to view the first few years of life as clearly a sensitive period for the development of healthy and maladaptive attachment patterns but to recognize that pathological parenting, parental psychopathology, family instability, and abuse and neglect tend to influence children continuously, not just in a single developmental era.

Further, although Kernberg (unlike many other theorists) emphasized temperamental contributions to BPD, models of temperament have always been underdeveloped in psychoanalysis, and increasingly research suggests that genes have both main effects and interactive effects in combination with environmental traumas (see Caspi et al., 2002; Nigg & Goldsmith, 1994; Torgersen, 1980; Torgersen et al., 2000; White, Gunderson, Zanarini, & Hudson, 2003). Recent studies suggest that subdimensions or endophenotypes of borderline personality (e.g., affect dysregulation and instability in interpersonal relationships) may be more heritable than the disorder itself. For example, a recent study (Zanarini et al., 2004) found that although the diagnosis of BPD showed familial aggregation, broader borderline symptom categories (affect, cognition, impulsivity, and difficulties in interpersonal relationships) showed even stronger familial aggregation and discriminated better between the relatives of BPD probands and those of the comparison subjects.

Direct examples of the interaction of genetic and environmental risk factors in the etiology of BPD do not exist at this point. However, a number of studies in domains related to the development of BPD (e.g., childhood sexual and physical abuse, attachment disorganization, impulsivity, depression) have demonstrated an interaction of environmental and biological influences (see Hoffman & McGlashan, 2003 for a review). Two areas of research are of particular relevance for BPD. Caspi and colleagues (2002, 2003) have focused on gene–environment interactions in a

large longitudinal sample from New Zealand. In a landmark study (Caspi et al. 2002), they found that a functional polymorphism in the promoter region of the serotonin transporter (*5-HTT*) gene moderated the influence of stressful life events in both childhood and adulthood on subsequent depression. Stressful events in adulthood, as well as abuse in childhood, predicted subsequent depressive symptoms and suicidality, two features that in combination often point to the presence of BPD, in individuals with the short allele of the *5-HTT* promoter, as compared to individuals homozygous for the long allele. In a second study, Caspi et al. (2003) found that a functional polymorphism in a gene regulating monoamine oxidase moderated the relationship between child abuse and antisocial behavior in adulthood.

Research on the neurobiology of early life stress also highlights the importance of the interaction of genetic and environmental factors in the development of psychopathology. These studies suggest that early life stress modifies brain circuits involved in stress regulation, resulting in a type of “biological priming” that interacts with genetic vulnerabilities to increase the risk of later psychopathology (Heim, Meinschmidt, & Nemeroff, 2003). Although none of the research to date directly addresses the development of BPD, the types of early life stress studied (notably early separation from mother in animal analogue studies, and childhood sexual and physical abuse in human studies) as well as the domains of documented outcomes (e.g., depression and substance abuse) are germane to an understanding of the interaction of genetic/biological risk factors in BPD.

Treatment of Borderline Psychodynamics

We conclude with a brief discussion of treatment because perhaps the most distinctive feature of psychodynamic treatments for BPD is their grounding in developmental theory. Once again, we first describe theories that emerged from clinical observation and then describe relevant research, focusing on both treatment principles and the nature of the patient–therapist relationship.

Theories of Treatment, Transference, and Countertransference

Although dynamic therapies for BPD focus on all of the domains of functioning described above as well as on the traumatic histories common in patients with BPD, generally speaking, dynamic approaches to the treatment of BPD share three goals. The first is to identify and alter pathological relationship paradigms (e.g., victim–victimizer) hypothesized to originate in patients’ families of origin, particularly in primary attachment relationships. Thus, dynamic work centers on patients’ fears of rejection, abandonment, and victimization, often as these become expressed in the therapeutic relationship.

The second goal is to increase the complexity and coherence of patients’ representations of themselves, others, and relationships. Perhaps the central goal of Kernberg’s approach to treatment is to identify, confront, and help patients integrate split representations.

The third goal is to identify and alter pathological modes of emotion regulation. The psychoanalytic literature has largely focused on self-destructive or manipulative behaviors used to regulate emotions (often by drawing others in) and on implicit forms of affect regulation (defense). Kernberg (1975) tends to emphasize borderline patients’ difficulty regulating rage and aggression and their use of immature defenses such as splitting, denial, and projection of their own feelings or impulses onto others. Self-psychological approaches focus on deficits in self-soothing in the face of tremendous pain and the consequently desperate ways patients with BPD may try to enlist others to help them avoid feeling empty, alone, or “fragmented” (i.e., feeling like they are “falling apart”). This latter approach to treatment emphasizes empathic attunement with patients with BPD and the internalization of soothing functions not developed in childhood. In reality, most dynamic treatments involve elements aimed at addressing both the rage, manipulateness, and splitting frequently seen in patients with BPD and emphasized by Kernberg, as well as and the desperate pain and incapacity to self-soothe emphasized by theorists such as Adler and Buie (1979).

Indeed, it would be difficult to imagine patients benefiting or staying over time in a treatment in which they did not receive some balance of confrontation of their pathology and empathic nurturance.) In practice, most dynamic clinicians also focus on deficits in conscious or explicit strategies for affect regulation (coping) emphasized and addressed systematically by Linehan (1993b). Using constructs derived from ego-psychological approaches to severe character pathology (Blanck & Blanck, 1979; Redl & Wineman, 1951).

Compared to technique, psychodynamic approaches also share the assumption that the therapeutic relationship provides an important medium through which to explore and alter problematic relational dynamics, representations, and emotion regulation strategies. In other words, patients are likely to express the problems that emerge in intimate relationships as they develop a more interpersonally meaningful relationship with the therapist over time, particularly as the therapy relationship begins to assume features of an attachment relationship. This is particularly true of patients with BPD, whose relational patterns tend to be activated readily and often very early in the therapy relationship. Indeed, the notion that structural change in aspects of personality such as emotion regulation and attachment status generally requires the clinician to become a significant other (if not an adult attachment figure) over time is a distinguishing feature of dynamic approaches to treatment of personality pathology. This reflects a developmental hypothesis, namely that competencies such as the ability to soothe oneself in the face of intensely distressing experiences (e.g., loss, rejection) emerges in the context of caregiving relationships and is unlikely to become fully internalized outside such a context, even in adulthood. To what extent this hypothesis is accurate is yet to be evaluated empirically.

The concepts of transference and countertransference (which refer in the therapeutic situation to the constellations of thoughts, feelings, motives, and behaviors of the patient and the therapist, respectively) have figured prominently in clinical descriptions of borderline psychopathology from the start. Stern

(1938) identified “negative therapeutic reactions” as one of the defining characteristics of borderline patients. He described borderline patients as having a narrow margin of psychological stability and security, leading to depressed, angry, and despondent responses to interpretations likely to yield more favorable reactions in higher functioning (neurotic) patients. Others noted that the development of immediate and intense transference reactions is a hallmark of therapy with borderline patients. Thus, Knight (1953) advocated as early as the 1950s a more structured approach to therapy with borderline patients than with the neurotic patients who had been the primary focus of psychoanalytic theory and practice.

Other psychoanalytic authors recognized early the strong countertransference responses often elicited by patients with BPD. In his classic paper, “The Ailment,” Main (1957) described ways patients with BPD treated in hospital settings create conflict among staff that essentially reproduce the patient’s split internal world. The result is often “staff splitting,” that is, conflict among staff members, who become polarized into those who see the patient as manipulative and malignant and have strong hostile or punitive reactions to the patient, and those who see the patient as a passive victim and want to “save” the patient, often from other staff members (Gabbard, 1989; Main, 1957). In such scenarios, staff members are drawn into enactments of the patient’s experience, playing out two prominent roles in the intrapsychic life of many patients with BPD: victimizer and protector. For example, one patient was hospitalized following an incident in which she had brandished a knife in front of her children (one of whom was herself improving from a severe psychiatric illness, and in so doing was beginning to separate psychologically from her mother), imploring them to kill her. The mother’s treating physician on the inpatient unit convened a meeting of all the mental health professionals treating the family and began by announcing that the patient had major depression and had been mistakenly “billed as a borderline” by other members of the treatment team.

Later psychoanalytic theorists came to recognize that the intensity of BPD patients’ emotions, particularly toward the therapist, their

difficulty reflecting on (rather than assuming the veracity of) their feelings and attributions toward the therapist, and their tendency to enact rather than to talk about their feelings toward the therapist tends to elicit strong countertransference reactions even in clinicians who are experienced and self-reflective (e.g., Searles, 1979). Stolorow (1995) and Gabbard (2005) suggest that a useful way to understand the transference–countertransference constellations that often emerge in psychotherapy with borderline patients is by distinguishing two prominent relationship paradigms: a repetitive dimension involving reenactment of relationships with early caregivers, and a wishful dimension reflecting the patient’s fantasy of obtaining a kind of nurturant, empathic “parenting” from the therapist hypothesized to be absent from the experience of many children who ultimately develop borderline dynamics. In the first pattern, the patient may see the therapist as the punitive, angry, or abandoning and herself as enraged, destructive, and defective. As in other relationships, the patient’s consequently provocative, angry, or demanding behavior (including self-harmful or suicidal actions) often in turn provoke precisely the kinds of responses the patient most fears (e.g., the therapist “dumping” the patient because of anxiety about her unpredictable suicidality, which is difficult for even experienced clinicians to tolerate). In the second transference–countertransference configuration, the therapist is often idealized, and the patient experiences herself as like a dependent child and the therapist as a gratifying parent who can fulfill unmet childhood needs. This often results in the patient perceiving a special relationship with the therapist (e.g., believing the therapist fully understands him or her in a way others, particularly parents and past treaters, did not).

As in other relationships, these representations of self and others may shift rapidly or alternate. For example, when the therapist fails to behave in a manner consistent with the patient’s idealizing expectations (e.g., going on vacation or not returning a phone call quickly enough), the patient may be unable to imagine the range of possible reasons and shift to seeing the therapist as victimizer (Kern-

berg, 1989; Masterson, 1978). These rapid representational shifts can lead the therapist to experience feelings analogous to those of a child with a borderline caregiver who develops a disorganized–disoriented attachment pattern, unable to form a coherent working model of the patient that can help him or her predict the patient’s firestorms. The result is a mixture of approach and withdrawal, anxiety and anger, which the patient often (correctly) perceives, consciously or unconsciously.

More generally, Gabbard and Wilkinson (1994) have described some of the common countertransference reactions to borderline patients. These include anger and hatred, helplessness and worthlessness, fear and worry, resentment, a sense of being manipulated, and urges to save or rescue the patient. In addition, they point out that transgressions of therapeutic boundaries (the most severe of which involve sexual contact) are more likely to occur in relationships with borderline patients, who themselves tend to come from families in which boundaries are poor and role reversals are common.

Research on Treatment, Transference, and Countertransference in Patients with BPD

Until recently, data on psychoanalytic treatments for BPD were scant. However, two research groups have now conducted randomized controlled trials (RCTs) on time-limited (1 to 2 year) versions of dynamic therapy for BPD. One group, led by Kernberg, is testing a 1-year manualized version of Kernberg’s approach to treating BPD called transference focused psychotherapy (TFP; Clarkin, Yeomans, & Kernberg, 1999; Yeomans, 2004). Most generally, TFP attends to the object-relational dynamics (e.g., fear of abandonment, aggression) and defenses of patients with BPD (e.g., splitting) by confronting aggression and manipulation, helping patients attain more balanced views of themselves and others, and interpreting conflicts impeding the capacity to love and work. TFP proceeds through a hierarchy of treatment goals, moving from containment of suicidal and self-destructive behavior and addressing negative transferences that can inter-

fere with treatment to a focus on identifying and altering dominant relational dynamics.

As the name implies, TFP focuses on clarification, confrontation, and interpretation within the context of the patient–therapist relationship and on identification of dominant object-relational paradigms (e.g., idealizer/idealized) active in the therapist–patient relationship. This includes observing and interpreting changes in these relational paradigms (e.g., a switch from role of victim to that of victimizer). A central principle underlying TFP is that increased awareness and understanding of distortions and problematic expectations the patient brings to relationships, including the therapy relationship, will lead to a more coherent understanding of self and others; and that this, in turn, will lead to increased ability to regulate emotions, particularly those emerging from interpersonal interaction.

A preliminary study of TFP (Clarkin et al., 2001) evaluated 23 female patients in twice weekly TFP over the course of 12 months. Initial pre–post data found significantly reduced numbers of suicide attempts, decreased severity of injury resulting from self-harming behavior, and fewer days and numbers of hospitalizations. A rigorous RCT of TFP has recently been completed (see Clarkin, Levy, Lenzenweger, & Kernberg, 2004) comparing it to supportive therapy and dialectical behavior therapy (Linehan et al., 1991). Initial papers describing the results are currently in preparation or under peer review.

A second treatment that has received recent empirical attention is Fonagy’s mentalization based treatment for BPD (MBT), which is grounded in attachment theory (Fonagy & Target, 2000; Fonagy et al., 2000). This approach focuses on developing increased mentalization capacities in patients with BPD (i.e., the capacity to imagine and reflect with greater complexity and accuracy on their own and others’ mental states). Given the difficulties patients with BPD have with the experience, expression, and regulation of emotion, MBT also aims to help patients identify emotions by clarifying and naming the emotion, understanding immediate precipitants, understanding the emotion in the context of past and

current relationships, learn to express the emotion appropriately, and to understand the responses others are most likely to have to the patient’s emotional expression (Bateman & Fonagy, 2003). The therapist maintains a “mentalizing stance” by focusing on and discussing the “here and now” mental states of the therapist and patient and linking these interactions to broader representational patterns in the patient’s experience. Transference interpretations are kept simple and limited primarily to relatively immediate or “experience near” encounters (e.g., the patient’s tendency to quit psychotherapy when she begins to feel too close to the therapist) and avoid historical interpretations.

A preliminary study (Bateman & Fonagy, 1999) examined the effects of an 18-month MBT-based approach to partial hospitalization on patients with BPD. Results were included decreased self-mutilation and suicide attempts; reduced length of inpatient hospitalizations; and reduced anxiety, depression, and interpersonal problems by self-report. Data collected at 18-month follow-up (e.g., 36 months from start of treatment) found that these treatment gains were maintained over time (Bateman & Fonagy, 2001). The investigators have recently completed a RCT of outpatient MBT, whose results, like those of TFP, are currently in preparation or under review.

With respect to transference and countertransference, two recent studies from our laboratory are of particular relevance (Betan, Heim, Conklin, & Westen, 2005; Bradley, Heim, & Westen, 2005). We developed two psychometric instruments for use by experienced clinicians, one to assess patients’ characteristic ways of responding in therapy (transference) and the other to assess clinicians’ own cognitive, affective, and behavioral reactions to a given patient (countertransference). The items consist of descriptions, in plain clinical language (i.e., with minimal jargon, so they can be used by clinicians of any theoretical orientation), of ways of responding cognitively, affectively, and behaviorally in psychotherapy described over many years in the clinical literatures on transference and countertransference. In both cases, factor analysis yielded highly interpretable dimensions that

were similar across theoretical orientations (psychodynamic and cognitive-behavioral), suggesting that they were not primarily the product of clinicians' theoretical preconceptions, given that cognitive behavior therapy does not have well elaborated versions of these constructs. For example, the transference measure yielded five dimensions, three of which (anxious/preoccupied, avoidant/counterdependent, and secure/engaged) strongly resembled adult attachment patterns identified using the AAI.

These measures can also be used to create aggregate descriptions of transference and countertransference patterns with different kinds of patients (see Betan & Westen, 2005; Bradley, Heim, et al., 2005). Thus, for the present purposes, we correlated all 90 items from the transference measure with a dimensional measure of BPD (the number of *DSM-IV* BPD symptoms met) and arranged the correlations in descending order of magnitude. This provides a description of the items most descriptive of transference patterns in BPD. We present here the 10 items with the highest correlations with BPD pathology ($r = .34-.46$, $p < .001$), in descending order. These items provide a compelling portrait of transference in borderline patients: "has difficulty dealing with separations (e.g., becomes upset, or denies clear distress, at vacations, etc.)"; "flies into rages at the therapist"; "is manipulative"; "is afraid of being abandoned by the therapist"; "vacillates between idealizing and devaluing the therapist"; "needs excessive reassurance from the therapist"; "needs to be special to the therapist; wants to be more important than the therapist's other patients"; "creates one crisis after another in therapy, leading to continuous questions about whether the relationship will survive"; "worries that the therapist doesn't like him/her"; and "is argumentative."

We performed the same procedure using the 79 items from the Countertransference Questionnaire. Once again, a simple listing of the 10 items with the highest correlations with number of BPD symptoms ($r = .37-.44$, $p < .001$) provides a striking empirical portrait of the "average expectable countertransference" response to patients with BPD: "I feel over-

whelmed by his/her strong emotions"; "I feel overwhelmed by his/her needs"; "I worry about him/her after sessions more than other patients"; "I feel used or manipulated by him/her"; "I feel I am 'walking on eggshells' around him/her, afraid that if I say the wrong thing s/he will explode, fall apart, or walk out"; "I feel mistreated or abused by him/her"; "S/he frightens me"; "I feel sad in sessions with him/her"; and "I feel pushed to set very firm limits with him/her."

These data provide substantial support for long-held clinical notions about transference and countertransference in the psychotherapy of borderline patients. They also document both the push-pull and love-hate dynamics patients with BPD present and draw from their treaters, as well as the disorganized-disoriented countertransference response they elicit from those who try to help them.

Conclusion

The borderline diagnosis, and a developmental approach to understanding the disorder, has its roots in psychoanalytic clinical theory and observation. As we have seen, understanding of the disorder has grown exponentially with the advent of empirical methods that can refine, revise, and discard hypotheses that emerged through clinical observation but cannot be systematically tested without the advantages of controlled quantitative research. Whereas once we might have hypothesized primarily direct effects from misattuned caregivers to borderline dynamics, today we recognize the likelihood that in many cases, above and beyond such direct effects may be genetically moderated effects of multiple contributing environmental pathogens, and that even the most "environmental" causes may lead to cascading biological processes (e.g., corticotropin-releasing hormone dysregulation, or amygdala hyperactivity) that mediate later psychological meanings in interpersonal encounters. Nevertheless, we hope to have shown that a dynamic approach to the nature, etiology, and treatment of BPD is not a fossil for the psychiatric museum but a living component of an evolving understanding of this enigmatic syndrome.

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