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# Borderline personality disorder, childhood trauma and structural dissociation of the personality



## Abstract

Borderline personality disorder and dissociation are strongly related. DSM-IV-TR criteria of BPD, for instance, include isolated dissociative symptoms (APA, 1994). Two thirds of BPD may be diagnosed of a dissociative disorder (Korzekwa, Dell and Pain, 2009). Both diagnoses have been related with high rates of childhood trauma. The close relationship between trauma, dissociation and borderline features can be understood from the perspective of the theory of structural dissociation of the personality (Van der Hart, Nijenhuis & Steele, 2006/2008) which transcends the traditional approach of describing "comorbidity". In this article we will review the empirical data which support the relation between early traumatizing and attachment disruption situations, and both borderline and dissociative symptoms. Borderline personality disorder will be explained in terms of structural dissociation of the personality.

## INTRODUCTION

Different factors have been proposed in the origin of borderline personality disorder (BPD). Some authors have remarked on the importance of genetic personality traits (Siever, Torgersen, et al, 2002) and their role as risk or protective factors with regard to sensitivity to context (Steele & Siever, 2010). Others have related early attachment relationships and BPD symptomatology (Barone, 2003; Buchheim et al, 2007; Grover et al, 2007; Bakermans-Kranenburg & Van IJzendoorn, 2009; Newman, Harris & Allen, 2010). Some researches point to a higher prevalence of trauma, in particular early, severe and chronic trauma among adult borderline patients (Horesh et al 2008; Tyrka et al, 2009; Ball & Links, 2009). High rates of dissociative symptoms have been reported in the literature. Some authors consider these dissociative symptoms as symptoms of a personality disorder (Linehan, 1993, 2006), while others argue that some

true dissociative disorders have been misdiagnosed as borderlines (Sar, Akyüz & Dogan, 2007; Putnam, 1997).

Some authors (Zanarini, 2000; Zanarini, Yong, Frankenburg et al, 2002) found a high prevalence of traumatizing events. Overall severe early traumatization and attachment disturbances are frequent in the history of BPD patients, and TDSP can bring some light to the link between early experiences, and the adult symptoms, as we will describe in further sections.

The study of isolated factors is important to understand the role of different aspects in the development of a disorder. But more comprehensive theories are needed to include individual factors in a global framework. The theory of structural dissociation of the personality (TSDP) offers a comprehensive theoretical explanation of how early experiences, including certain attachment styles and relational trauma, can generate a division of the personality. This division manifests in both borderline symptoms and those of dissociative disorders; from this perspective, they share a common origin. Thus, the term "structural dissociation" does not refer only to dissociative disorders, but involves the recognition that dissociation is the basic feature of traumatization and posttraumatic responses.

This article will review the evidence regarding attachment disturbances, early trauma, dissociation and personality disorders. Theory of structural dissociation of the personality will be briefly described. Genetic factors, childhood attachment and early trauma will be described as confluent factors that influence the development of different borderline features in each individual case. Finally, a tentative description of the BPD clinical phenomena will be presented.

## EARLY TRAUMA, ATTACHMENT DISRUPTIONS, AND BORDERLINE PERSONALITY DISORDER

### Early Trauma and Borderline Personality Disorder

As described with regard to Criterion A of posttraumatic stress disorder (APA, 1994), the classic vision of trauma considers it from the perspective of a traumatizing

event and its characteristics: a threat to the physical integrity of oneself or other people. But in childhood, many perceived threats stem more from caregivers' affective signals and caregiver availability than from the actual level or physical danger or risk for survival (Schuder & Lyons-Ruth, 2004). An often overlooked form of traumatization pertains to the so-called "hidden traumas," that are related to the caregiver's inability to modulate the affective dysregulation (Schuder & Lyons-Ruth (2004).

Different studies have described a frequent comorbidity between PTSD and BPD (Driessen et al, 2002; McLean & Gallop, 2003; Harned, Rizvi, & Linehan 2010; Pagura et al, 2010; Pietrzak et al, 2010). Others found a relationship between BPD and emotional abuse (Kingdon et al, 2010) and different kinds of abuse (Grover, 2007; Tyrka et al, 2009). A history of childhood trauma predicts a poor outcome in borderline patients (Gunderson, 2006). PTSD symptoms together with dissociative symptomatology predict self-destructive behaviors (Spitzer et al, 2000; Sansone et al, 1995).

Zanarini (2000a) reviewed the empirical literature that described estimates of childhood sexual abuse in BPD ranging between 40 to 70% compared with the rate of childhood sexual abuse in other Axis II disorder patients (19% to, 26%). While many of these studies were retrospective, some studies included prospective measures, and all showed a significant relationship between sexual abuse, childhood maltreatment, BPD precursors and BPD (Battle, Shea, Johnson et al, 2004; Cohen, Crawford, Johnson & Kasen, 2005; Rogosch & Chicchetti, 2005; Yen, Shea, Battle et al, 2002). Early maltreatment has been related not only to BPD, but to other mental disorders. However, these studies show that the relation is strongest with BPD as compared to other personality disorders. The severity of sexual abuse has also been related with the severity of BPD features (Silk, Lee, Hill & Lohr, 1995; Zanarini, Yong, Frankenburg et al, 2002) and self-harming behaviors (Sansone et al, 2002).

Battle, Shea, Johnson, DM et al. (2004) developed a multisite investigation in which self-reported history of abuse and neglect experiences were assessed among 600 patients diagnosed with either a PD (borderline, schizotypal, avoidant, or obsessive-compulsive) or major depressive disorder without PD. They found that rates of childhood maltreatment among individuals with PDs are generally high (73% reporting abuse and 82% reporting neglect). BPD was more consistently associated with childhood abuse and neglect than other PD diagnoses.

Graybar and Boutilier (2002) reviewed the empirical literature on BPD and various childhood traumas. They concluded that the reported rates of physical, sexual, and verbal abuse and neglect among BPD patients ranged from 60–80%. Laporte and Guttman (1996) also studied a range of childhood experiences in female patients with BPD and those with other personality disorders. They found that the patients with BPD were more likely to report a history of adoption, paternal alcoholism, parental divorce, parental desertion, leaving home before age 16, verbal abuse, physical abuse, sexual abuse, and witnessing more abuse than patients with other personality disorders. Furthermore, a significantly higher percentage of BPD patients than non-BPD patients reported multiple occurrences and more than one type of abuse. Paris and Zweig-Frank (1997) found that the degree of severity of the abuse could distinguish individuals with BPD from those without BPD.

Ball and Links (2009) review the literature on trauma and BPD in the context of Hill's classic criteria (1965) for demonstrating causation (strength, consistency, specificity, temporality, biological gradient, plausibility, coherence, experimental evidence and analogy). These authors demonstrated that trauma can be considered a causal factor in the development of BPD, as part of a multifactorial etiologic model.

Goodman and Yehuda (2002) reviewed a number of empirical studies and concluded that the frequency of the overall rate of childhood sexual abuse among BPD patients ranged from 40–70% compared to 19–26% among patients with other personality disorders. However, in recent years, many researchers have pointed out that the association between (remembered) childhood sexual abuse and BPD might not be as strong as the previous studies indicated. Golier et al (2003) found high rates of early and lifetime trauma in a sample of personality disorders. Borderline patients had significantly higher rates of childhood/adolescent physical abuse (52.8% versus 34.3%) and were twice as likely to develop PTSD. Yen et al. (2002) found that between different personality disorders, BPD participants reported the highest rate of traumatic exposure (particularly sexual trauma, including childhood sexual abuse), the highest rate of posttraumatic stress disorder, and youngest age of first traumatizing event.

Johnson, Cohen, Brown et al. (1999) found that persons with documented childhood abuse or neglect were more than 4 times as likely as those who were not abused or neglected to be diagnosed with PDs during early adulthood after age, parental education, and parental psychiatric disorders were controlled statistically.

Sabo (1997) found an interaction between childhood trauma and borderline features, also including attachment issues as relevant factors. Fossati, Madeddu, and Maffei (1999) conducted a meta-analysis of 21 studies that examined the relationship between BPD and childhood sexual abuse. They found that the effect size is only moderate.

Table 1. Studies about childhood trauma in BPD

<b>Studies</b>	<b>Childhood trauma in BPD</b>
Zanarini (2000b)	40-70% of childhood sexual abuse in BPD
Battle, Shea, Johnson et al, 2004; Cohen, Crawford, Johnson & Kasen, 2005; Rogosch & Chiccetti, 2005; Yen, Shea, Battle et al, 2002	Positive relationship in prospective studies of childhood sexual and physical abuse and BPD
Silk, Lee, Hill & Lohr, 1995; Zanarini, Yong, Frankenburg et al, 2002; Sansone et al, 2002	Positive relationship between severity of sexual abuse, severity of borderline symptoms and self-harming behavior
Johnson, JG; Cohen, P; Brown, J et al. (1999)	Persons with documented childhood abuse or neglect have 4 times higher probability to be diagnosed with PDs
Battle, Shea, Johnson, DM et al. (2004)	73% childhood abuse and 82% neglect
Graybar & Boutilier (2002)	Physical, sexual, and verbal abuse and neglect 60-80%
Laporte & Guttman (1996)	BPD have multiple occurrences and more than one type of abuse
Goodman & Yehuda (2002)	Childhood sexual abuse range from 40-70%
Golier et al (2003)	52,8% of childhood/adolescent physical abuse
Fossati, Madeddu, & Maffei (1999)	Meta-analysis founding evidence for a moderate effect of childhood sexual abuse

### STUDIES ABOUT CONSEQUENCES OF EARLY TRAUMATIZATION

Above we have seen how prevalent traumatic antecedents are in BPD. However, we can analyze the relationship between borderline personality and trauma from a different angle, i.e., focus on the consequences of early and severe traumatization. Herbst et al (2009) say that the diagnosis of PTSD does not adequately describe the impact of exposure to trauma on the developing child. Examining the prevalence of different interpersonal trauma types and the long-term effects of maltreatment and neglect in adolescents 71% of the traumatized adolescents did not meet the criteria for PTSD. The most common diagnosis in the sample was BPD.

Some authors (Herman, 1992; Van der Kolk et al, 2005) have also remarked that

PTSD symptoms are only adequate to describe the consequences of single traumatic events, but do not include most of the features which are consequences of early, severe and chronic maltreatment and neglect. To describe these clinical presentations, a new category has been proposed for DSM-V: The Disorders of Extreme Stress (DESNOS: Van der Kolk, Roth, Pelcovitz, Sunday & Spinazzola, 2005). Victims of chronic interpersonal trauma present features that have not been adequately described with the posttraumatic stress disorder criteria. Herman (1992) proposes a different concept that she has called Complex PTSD. They arranged the symptoms in seven categories: Dysregulation of (a) affect and impulses, (b) attention or consciousness, (c) self-perception, (d) perception of the perpetrator, (e) relations with others, (f) somatization and (g) systems of meaning. Many of these symptoms overlap with borderline criteria, supporting from a different point of departure a relationship between early, chronic relational trauma and borderline personality disorder (Roth, Newman, Pelcovitz, Van der Kolk, & Mandel, 1997; Van der Kolk, Roth, Pelcovitz, Sunday & Spinazzola, 2005; Driessen et al., 2002; Gunderson & Sabo, 1993; McLean, & Gallop, 2003; Yen et al., 2002). Some authors (Classen et al, 2006) proposed to speak of post-traumatic personality disorder-disorganized (PTPD-D) and posttraumatic personality disorder-organized (PTPD-O). This category does not explain the process, which leads from early traumatic experiences to adult psychopathology, that we will further describe in terms of structural dissociation. Although PTPD-D fails to include many dissociative symptoms which are usually present in these patients, it does support the idea of borderline symptoms as traumatic consequences.

### **Magnification or minimization of childhood trauma influence?**

In previous sections we described different empirical studies and meta-analyses related to the frequency with which borderline patients reported traumatic antecedents. In our discussions with colleagues who treat BPD patients, we observed that they often question these data, arguing that borderline patients may have a tendency to magnify, exaggerate or make up childhood trauma in order to attract attention from the therapists. These comments do not seem to be confirmed by empirical research, which shows that trauma reports did not change when BPD patients improve from their disorder (Kremers et al, 2007). But the opposite problem needs to be considered: many severe traumatic experiences suffered during childhood might not be remembered during the adulthood (Chu et al, 1996). The presence of dissociative amnesia could be a factor which leads some clinicians and researchers to minimize the influence of traumatic factors in BPD.

Studies about the phenomenon of dissociative amnesia with regard to childhood trauma and specifically sexual abuse, have yielded controversial results. Herman and Schatzow (1987) found that a majority of women (general patients, not specifically BPD) who had sought treatment in a time-limited incest survivors' groups experienced complete or partial amnesia for their sexual abuse at some time in the past. The overwhelming majority of these women, were able to find some corroborating evidence of the abuse. Seventy-four percent (74%) were able to find convincing evidence that the incest had occurred, such as a family member who confirmed it, or, in one case, diaries and other evidence of a deceased brother who had been the perpetrator. Another 9% found family members who indicated that they thought the abuse had likely occurred, but who could not confirm it. Eleven percent (11%) made no attempt to corroborate their abuse, leaving only 6% who could find no validating evidence despite efforts to do so. Those critical of this study have noted that a proportion of the amnesic subjects were very young and perhaps had normal childhood amnesia, and that clear, independent corroboration of abuse was not obtained (Ofshe & Singer, 1994; Pope & Hudson, 1995).

A study by Briere and Conte (1993) indicated that 54% of patients who reported sexual abuse memories mentioned having had some amnesia for the abuse between the time of occurrence and age eighteen. Williams (1994) contacted adult women who had been treated for sexual abuse seventeen years earlier in a city hospital, and asked them to participate in a study about hospital services. Thirty-eight percent (38%) seemed to be amnesic for those experiences. Terr (1988, 1991) describes amnesias and disruptions in recall in chronically traumatized children.

## Attachment and Borderline Personality Disorder

Sabo (1997) reviewed literature on childhood experiences among patients with BPD, and concluded that biparental emotional neglect and absence of substitute adult attachment figures were powerful traumatizing factors in the development of BPD. He found that with children who had at least one supportive parent or caretaker the risk of developing BPD was lessened. Other authors have suggested the importance of biparental failure in the development of BPD (Zanarini et al, 2000c; Zweig-Frank & Paris, 1991).

Parental bonding is another major factor that has been believed to be associated with BPD pathology (Guttman & Laporte 2002). Zweig-Frank and Paris (1991) found the BPD individuals recalled their parents (both mother and father) as less caring and more overprotective than did the non-BPD individuals, indicating that control without affection characterizes some parents of BPD individuals. Parental behavior not only seems to affect development of BPD pathology directly, but dysfunctional parenting might increase vulnerability to other risk factors, mediating the effects of other psychosocial factors. For example, Zanarini et al (2000c) reported that female BPD patients who recalled their mother as neglectful and their father as abusive were more likely to have been sexually abused by a noncaretaker. Zanarini and colleagues hypothesized that a neglectful mother might not be able to protect the child from sexual abuse by a noncaretaker and an abusive father might lead his daughter to believe that being used or abused is unavoidable.

Gunderson (1984, 1996) suggested that intolerance of aloneness was at the core of borderline pathology. He regarded the inability of those with BPD to invoke a “soothing introject” to be a consequence of early attachment failures. He carefully described typical patterns of borderline dysfunction in terms of exaggerated reactions of the insecurely-attached infant, for example clinging, fearfulness about dependency needs, terror of abandonment and constant monitoring of the proximity of the caregiver.

Different authors have related disorganized attachment with BPD, explaining how it relates to a lack of integrated self schemata (Barone, 2003; Lyons-Ruth, Yellin, Melnick et al, 2005; Liotti, 2004; Blizard, 2003; Fonagy, Gegerly, Jurist et al, 2002; Schore, 2001). There have been many past attempts to explain BPD symptoms using attachment theory (Bateman & Fonagy 2004). Implicitly or explicitly, Bowlby’s (1969, 1973, 1980) suggestion that early experience with the caregiver serves to organize later attachment relationships has been used in explanations of psychopathology in BPD (Bateman & Fonagy 2004; Fonagy & Bateman 2007). For example, it has been suggested that the borderline person’s experience of interpersonal attack, neglect and threats of abandonment may account for their perception of current relationships as attacking and neglectful (Benjamin, 1993).

Crittenden (1997 a,b) has been particularly concerned to incorporate in her representation of adult attachment disorganization, the specific style of borderline individuals who are deeply ambivalent and fearful of close relationships. On the other hand, Lyons-Ruth and Jacobovitz (1999) focused on the disorganization of the attachment system in infancy as predisposing to later borderline pathology. They identified an insecure disorganized pattern as predisposing to conduct problems.

Fonagy (2000) and Fonagy et al (2000) have also used the framework of attachment theory, emphasizing the role of attachment in the development of symbolic function and the ways in which insecure disorganized attachment may generate vulnerability in the face of further turmoil and challenges. All these, and other theoretical approaches, predict the representations of attachment (Hesse & Main, 2001) to be seriously insecure and arguably disorganized in patients with BPD (Fonagy & Bateman, 2007). For Bateman and Fonagy (2004), there is no doubt that people with BPD are insecure in their attachment. However, they point out that descriptions of insecure attachment from infancy or adulthood provide an inadequate clinical account for several reasons, such as anxious attachment being very common and anxious patterns of attachment in infancy corresponding to relatively stable adult strategies (Main et al., 1985). Yet, the hallmark of the disordered attachments of borderline individuals is the absence of stability (Higgitt & Fonagy, 1992).

Paris (1994) proposes an integrated theory of the etiology of BPD: a biopsychosocial model that attempts to explain how personality disorders in general, and BPD in particular, could develop. This model involves the cumulative and interactive effects of many risk factors as well as the influence of protective factors: the biological, psycho-

logical, or social influences that act to prevent the development of the disorder. Paris thinks that temperament can predispose each child to certain difficulties but that temperament characteristics in the presence of psychological risk factors, such as trauma, loss and parental failure, could become amplified. As an illustrated example he explains that most shy children (temperament) grow out of normal shyness but if the family environment is unsupportive, introversion can become accentuated (trait) and with time, if they persist, become pathological (disorder). Shyness can lead a child to establish social contacts characterized by anxiety and/or withdrawal, and an abnormal attachment pattern. But if this persists, the behaviors can begin to correspond to the criteria for personality disorders of the dependent and avoidant types.

Another interesting aspect that Paris points out is that the future BPD patient would begin life with temperamental characteristics that are compatible with normality (for example, a child more inclined toward action than reflection); but given a reasonably adequate psychosocial environment, they might never develop a personality disorder. He also states that parents of the future borderline patients might themselves have personality disorders, they might be insensitive to the needs of their children and fail to provide an adequate holding environment. Positive experiences with secure attachment figures can be one of the most effective protective social factors (Mosquera y Gonzalez, 2009b, 2011).

Allen (2003) talks about parental role confusion. He describes how the parents of BPD are seemingly focused on their children nearly to the point of obsession, yet simultaneously angry with them. One way to understand the parent's contradictory and seemingly irrational behavior within the families of BPD patients is to conceptualize it as a reaction to a severe and highly pervasive intrapsychic conflict over the parenting role. This conflict is created and reinforced by the parents' experience within their own families of origin. Ambivalence over being a parent is the parent's core conflictual relationship theme (Luborsky & Crits-Cristoph, 1990). They feel as if it they solemn duty to sacrifice everything for their children, but at the same time they feel overwhelmed by the responsibility and resentful of the sacrifices.

All in all, attachment difficulties cannot completely explain the complexity of BPD and are not the only factor for a person to develop BPD, even though it is a piece of the puzzle (Mosquera, D., Gonzalez, A., 2009b).

## GENETIC AND BIOLOGICAL FACTORS

To understand the role of early environmental aspects in personality development is not a denial of constitutional factors. A debate between constitutional versus environmental origins of mental disorders is not the goal of this article. We understand that genetic aspects influence character traits, and temperament interacts with environmental elements in a complex way. Some very extreme character traits (i.e.: an extreme impulsivity) may generate personality disorders with little environmental contribution. We believe the majority of the cases are in the middle of the spectrum, where insecure relationships with primary caregivers and the presence of traumatizing situations could drive the individual to develop a borderline personality.

In order to design a truly comprehensive theory, it is important to include the role of genetic factors. But there are different data from different researches. Plomin, DeFries, McClearn and McGuffin (2001) state that genes account for 40–60% of the variability in normal personality traits. These normal personality traits could develop in a personality disorder when the individual grows with a dysfunctional attachment or a traumatic environment.

Relations between attachment, genetics and personality disorders are complex and have not been established. We can consider that insecure attachment causes emotional dysregulation. But both insecure attachment and emotional dysregulation could be mediated by the same heritable differences in temperament or personality traits (Goldsmith & Harman, 1994). Recently, the influence of environmental factors in phenotypic range of gene expression has been outlined (Lobo & Shaw, 2008). This aspect needs to be studied with regard to early attachment versus genetics in the development of BPD. However, the interaction between genetics and environment probably is even more complex than has been assumed. Brussoni, Jang, Livesley and MacBeth (2000) found that genes accounted for 43, 25 and 37% of the variability in fearful, pre-occupied and secure attachment. Variability in dismissing attachment, in contrast, was

found to be entirely attributable to environmental effects. Skodol et al. (2002) stated that aspects of personality disorder that are likely to have biologic correlates are those involving regulation of affects, impulse/action patterns, cognitive organization and anxiety/inhibition. For BPD, key psychobiological domains would include impulsive aggression, associated with reduced serotonergic activity in the brain, and affective instability, associated with increased responsiveness of cholinergic systems. Siever et al. (2002) state that family aggregation studies suggest the heritability for BPD, not as a diagnosis but the genetic basis for this disorder, may be stronger for dimensions such as impulsivity/aggression and affective instability than for the diagnostic criteria itself.

Environmental and genetic effects are better differentiated in twin studies, but these researches are very difficult and expensive to do. Some twin studies analyze the heritable effects of attachment in children, finding no significant genetic effects. Environmental influences explain 23-59% of the variance (Bakermans-Kranenburg, Van IJzendoorn, Schuengel, & Bokhorst, 2004; Bokhorst, Bakermans-Kranenburg, Fearon, Van IJzendoorn, Fonagy & Schuengel, 2003; O'Connor & Croft, 2001). Other research by Crawford et al (2007) found that anxious and avoidant attachment are related to personality disorder (PD). They related avoidant attachment and emotional dysregulation, concluding from their data that 40% of the variance in anxious attachment was heritable, and 63% of its association with corresponding PD dimensions was attributable to common genetic effects. Avoidant attachment was influenced by the shared environment instead of genes.

The question regarding the possibility that primary caregivers share genetic determinants with the children is more complex than merely considering this a genetic causation. All these elements (shared character features and attachment styles) with the occurrence of traumatizing events, could have a multiplicative effect. For example, an impulsive father will probably have difficulties when it comes to regulating impulsive behaviors in his children, frequently reacting in a critical or violent way to the child's behavior. The presence of a character trait does not invalidate the role of the caregiver management of this trait. On the contrary, the existence of a personality trait is a vulnerability factor for the children, who will be probably more affected by the caregiver attitude.

The same dynamics take place with emotional dysregulation. We commented before that emotional dysregulation and insecure attachment could be partially mediated by heritability. It would be highly probable that a baby with a genetic tendency to dysregulate emotions will evolve better with a parent who can modulate her/his emotions. When the parent has few emotional regulation skills, because both baby and parent share the same genetic traits, s/he probably will potentiate the baby's emotional dysregulation. The effect of a dysregulated style in a caregiver would be more intense on a baby who has a deficient emotional regulation capacity.

In summary, relationship between genetic factors, personality traits, and attachment styles are probably complex, and have not been clearly confirmed or refused. The most probable situation is that genetic factors such as emotional dysregulation, may influence personality traits. But these traits could be modulated or exacerbated by the relationship with the primary caregiver (Schoore, 2003 a, b).

Another issue involving biological factors is the debate around comorbidity versus diagnostic confusion between Axis I diagnosis – with more clear genetic/biologic basis – and BPD (Zanarini et al, 1998). Liebowitz (1979) argued that borderline personalities are not clearly separated from the older concept of borderline Schizophrenia, while others have insisted in the separation of both diagnosis (Gunderson & Kolb, 1979; Kernberg, 1979; Spitzer & Endicott, 1979; Masterson, 1976). In a similar way some authors have considered BPD as a variant of Bipolar Disorder (Akiskal et al, 1985) and others question this assumption (Paris, 2004). Probably, as we will further comment, all these ideas are partially true. Some BPD patients manifest atypical presentations of Bipolar Disorder, where emotional dysregulation is just a symptom of the underlying disorder. We propose to consider the possibility that some borderline cases could have a more biological basis and others a more environmental basis, with the weight of these factors being different among different patients.

## **DISSOCIATIVE DISORDERS AND BORDERLINE PERSONALITY DISORDER: A RELATIONSHIP BEYOND COMORBIDITY**

Different research studies report a high frequency of dissociation among BPD

patients (Galletly, 1997; Paris & Zweig-Frank, 1997; Chu & Dill, 1991). Some researchers state that many patients with BPD also have an undiagnosed dissociative disorder. These studies used a categorical approach of dissociation which, however, does not include those cases in which the dissociative features do not fully meet criteria for a DSM-IV-TR diagnosis of dissociative disorder. Still, these studies reflect how relevant dissociation is in borderline patients. In an empirical study with psychiatric inpatients Ross (2007) found that 59% of BPD patients met criteria for a DSM-IV-TR dissociative disorder, as compared with 22% of non-borderline patients. Korzekwa, Dell and Pain (2009) reviewed a number of studies that used various diagnostic instruments with different populations. They found relevant dissociative symptoms in about two thirds of people with borderline personality. Sar et al (2006) analyzed, in a non-clinical (student) population, the dissociative disorder comorbidity in BPD patients and its relation to childhood trauma reports. Among the students diagnosed as BPD (8.5%), a significant majority (72.5%) of them had a dissociative disorder whereas this rate was only 18.0% for the comparison group. Furthermore, for the authors the lack of interaction between dissociative disorder and BPD for any type of childhood trauma that was found in this research contradicts the opinion that both disorders together might be a single disorder. Watson et al (2006) found that BPD patients with a comorbid dissociative disorder have higher scores on reported childhood trauma. Zanarini et al. (2000b) found that sexual abuse is related to dissociative experiences in borderlines. Brodsky et al (1995) found a relationship between dissociation, childhood trauma and self-mutilation, while other authors (Zweig-Frank, Paris, et al, 1994) did not.

Part of the diagnostic confusion could be due to the fact that many standardized instruments for diagnosing mental disorders do not include dissociative symptoms and dissociative disorders. A main example is the SCID I, i.e., the major standardized interview for diagnosing Axis I DSM-IV-TR mental disorders, which does not include dissociative symptoms. With regard to Axis II disorders, the SCID-II does not include dissociative symptoms either. For this reason, studies based on these interviews systematically underestimate comorbid dissociative symptoms and disorders. Therefore, only when specifically designed instruments to evaluate dissociative symptoms and dissociative disorders are included, can this part of the psychopathology be detected. It is true that Criterion 9 for BPD (transient, stress-related paranoid ideation or severe dissociative symptoms) does take into account dissociative symptoms. However, these can go unnoticed for therapists not familiar with dissociative disorders. In countries like Spain, clinicians commonly do not include dissociative symptoms in their psychopathological exploration (Gonzalez, 2010). Delusions, which could be related to comorbidity with atypical presentations of schizotypic or schizophrenic disorders, are mixed (in criterion 9) with dissociative symptoms. Among dissociative symptoms, depersonalization or trance-like states are probably more commonly identified as dissociative than are other dissociative symptoms which are related to division of the personality (such as intrusive symptoms).

A high prevalence of BPD among patients with dissociative disorders also supports a close relationship between both disorders. According to Putnam (1997), clinical studies suggest that 30% to 70% of patients with dissociative identity disorder (DID) meet criteria for BPD. In a study aimed at determining the prevalence of dissociative disorders among women in the general population, participants with a dissociative disorder presented more frequently with BPD (among other diagnoses) than did participants without a dissociative disorder (Sar, Akyüz & Dogan, 2007).

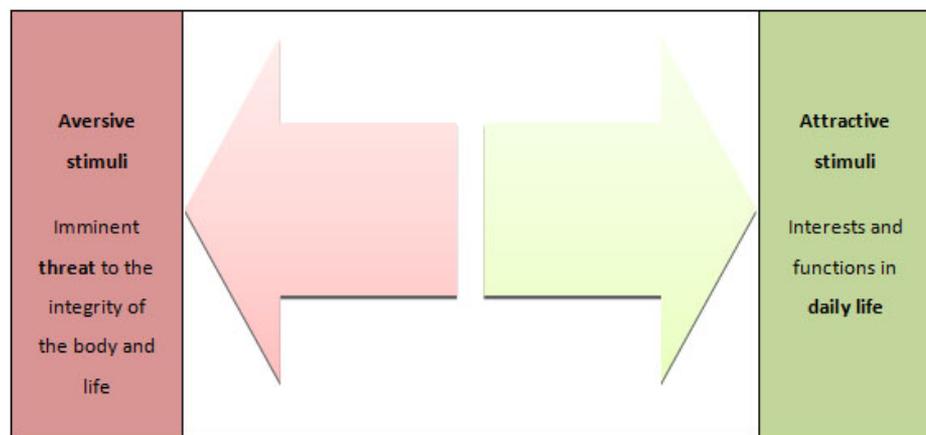
An unresolved major question pertains to understanding BPD patients who also meet the diagnostic criteria for DID or DDNOS: are these to be seen as clear-cut comorbid diagnoses, or should the borderline features be regarded as manifestations of an underlying dissociative disorder. The theory of structural dissociation of the personality offers a feasible way out of this dilemma (false choices between opposite options).

## **THE THEORY OF THE STRUCTURAL DISSOCIATION OF THE PERSONALITY**

Inspired by Allport (1981) and Janet (1907), Van der Hart and colleagues (2006/2008) define personality as the dynamic organization within the individual of those biopsychosocial systems that determine his or her characteristic mental and behavioral actions. Among the biopsychosocial systems that comprise the personality,

evolutionary prepared psychobiological action systems play a major role (Lang, 1995; Panksepp, 1998; Van der Hart et al., 2006/2008). One major action system is defensive in nature and involves a variety of efforts to survive imminent threat to the integrity of the body and life (Fanselow & Lester, 1988). The mammalian defense action system is geared toward escape from and avoidance of physical and associated psychological threat, and includes subsystems such as flight, freeze, fight, and total submission (Porges, 2003). Other action systems are concerned with interests and implied functions in daily life (Panksepp, 1998). These systems include energy regulation, attachment and care-taking, exploration, social engagement, play, and sexuality/reproduction, and involve approaching attractive stimuli (Lang, 1995).

**Figure 1. Action systems**



TSDP thus postulates that in trauma - not only criteria A trauma events but also what we could call attachment trauma - the patient's personality becomes unduly but not completely divided among two or more such dissociative subsystems or parts (Van der Hart et al., 2006/2008; Van der Hart, Nijenhuis, & Solomon, 2010), each mediated by particular action (sub) systems and each with its own first-person perspective. These dissociative parts, also known by other names such as dissociated self-states, are dysfunctionally stable (rigid) in their functions and actions, and overly closed to each other. One prototypical personality subsystem is metaphorically called the Emotional Part of the Personality (EP; Myers, 1940; Van der Hart et al., 2006/2008). As EP the patient is fixated in sensorimotor and highly emotionally charged reenactments of traumatic experiences. As Janet (1919/25) stated years ago:

*"Such patients [i.e., their EP's]... are continuing the action, or rather the attempt at action, which began when the thing happened, and they exhaust themselves in these everlasting recommencements" (p. 663).*

In short, the patient as EP is strongly associated with traumatic memories. Primarily mediated by the mammalian action systems of defense and attachment cry, EP's reenactments include action tendencies of defense against perceived or actual threat to the integrity of the body or to life itself, as well as action tendencies regarding the need for attachment and the fear of attachment loss (Liotti, 1999). That is, EP is basically fixated in traumatic memories that frequently involve (particular combinations of) childhood emotional, physical, and sexual abuse, emotional neglect, and otherwise frightening and frightened parental or parent substitutes' caretaking and attachment. EP is mediated by the innate action system of defense against threat and may be guided in particular by one of its subsystems: fight, flight, freeze, collapse, total submission, hypervigilance, wound care, restorative states.

The other prototype is called the *Apparently Normal Part of the Personality* (ANP; Myers, 1940; Van der Hart et al., 2006). As ANP, the survivor experiences EP and at least some of EP's actions and contents as ego-dystonic and is fixated in avoidance of traumatic memories and often of inner experience in general. Mediated by action systems for functioning in daily life, ANP focuses on the functions of these systems and in this context commonly seeks the approval of caretakers to gain acceptance, protection, and love. To the degree that such attachment-related goals are realized at all, the painful

result is that ANP's appeasement and apparent normality are reinforced, not the survivor's authenticity. As ANP, the patient may be aware of having a mental disorder but attempts to appear "normal." The fact that this normality is only apparent manifests in negative symptoms of detachment, numbing, and partial or, in rather exceptional cases, complete amnesia for the traumatic experience. Apparent normality also shows in recurrent re-experiencing of traumatic memories from EP and other intrusions such as ANP hearing EP's voice, or EP hearing ANP's voice. ANP's mental and behavioral actions are mainly mediated by daily life action systems (social engagement, attachment, care-giving, exploration, play, energy regulation, sexuality/reproduction).

Structural dissociation is the essence and outcome of traumatic experiences, but is maintained by phobic mental and behavioral actions. The core phobia is the phobia of traumatic memories, and from this central phobia, emerge other related inner-directed phobias. Marilyn Van Derbur (2004), a survivor of incest, describes it very graphically:

*"I was unable to explain to anyone why I was so tied up, walled off and out of touch with my feelings... To be in touch with my feelings would have meant opening Pandora's box... Without realizing it, I fought to keep my two worlds separated. Without ever knowing why, I made sure, whenever possible that nothing passed between the compartmentalization I had created between the day child [ANP] and the night child [EP]." (pp. 26, 98)*

Apart from clinical evidence, there is emerging research that supports the major tenets of the theory of structural dissociation (e.g., Reinders et al., 2003, 2006; see Van der Hart, Nijenhuis, & Solomon, 2010, for a brief overview).

### Levels of Structural Dissociation

TSDP postulates that the more intense, more frequent, longer lasting traumatization is, and the earlier in life it started, the more complex the structural dissociation of the personality becomes. The division of the personality into a single ANP and a single EP involves primary structural dissociation, and characterizes simple posttraumatic dissociative disorders, including PTSD.

When traumatizing events start earlier in life, are increasingly overwhelming and/or prolonged or chronic, structural dissociation tends to be more complex. In secondary structural dissociation there is also a single ANP, but more than one EP. This division of EP's may be based on the failed integration among relatively discrete subsystems of the action system of defense, e.g., fight, flight, freeze, collapse. We consider secondary structural dissociation to be mainly relegated to Complex PTSD, trauma-related BPD and DDNOS-subtype 1. ANP and EPs are typically fixated in a particular insecure attachment pattern that involves either approach or defense in relationships (Steele et al., 2001). It is hypothesized that, in complex trauma-related disorders, the resulting alternation or competition between relational approach and defense among these parts is a substrate of what has been called a disorganized/disoriented attachment style (Liotti, 1999). The resolution of traumatic memories, by definition, involves (a degree of) resolution of this insecure attachment.

Finally, tertiary dissociation involves not only more than one EP, but also more than one ANP. Division of ANP, along different action systems of daily life, may occur as certain inescapable aspects of daily life become saliently associated with traumatizing events such that they tend to reactivate traumatic memories. The patient's personality becomes increasingly divided in an attempt to maintain functioning while avoiding traumatic memories, or has never included an integration of action systems for functioning in daily life as well as for defense. Tertiary structural dissociation refers only to patients with DID. In a few DID patients who have a very low integrative capacity and in whom dissociation of the personality has become strongly habituated, new ANPs may also evolve to cope with the minor frustrations of life. Dissociation of the personality in these patients has become a lifestyle, and their prognosis is generally poor (cf., Horevitz & Loewenstein, 1993). Borderline patients with a comorbid dissociative disorder can have secondary or tertiary structural dissociation of the personality.

### Different subgroups of BPD and structural dissociation of the personality

To argue whether BPD is generated either by biological or environmental factors

probably involves a false debate. Reality comprises complex phenomena, and science often reaches a common point: all the answers are true and more research are needed. Without falling into an absolute relativism, a truly comprehensive model of BPD needs to include all the recent evidence and integrate different areas of knowledge. Currently, enough data exist that support a multimodal model for BPD.

We propose that such a model based on a clinical perspective, as statistical analysis of groups of symptoms does not fully explain individual differences. The relative influence of different factors is probably not the same for each patient, and should in our opinion be evaluated case by case. Based on our extended clinical observations, we believe that BPD patients may constitute a heterogeneous group. Hunt (2007) stated that BPD's etiology would be best explained as consisting of a combination of genetic, neurobiological vulnerability combined with childhood trauma, including abuse or neglect, that lead to dysregulated emotions, distorted cognitions, social skills deficits, and few adaptive coping strategies.

We understand the borderline group as stemming from a combination of a trauma factor (and implied structural dissociation) and a biological factor. In order to conceptualize cases, it could be useful to classify borderline patients in three groups. At one end, we would place the more dissociative borderline patients (sometimes dissociative disorders misdiagnosed as BPD), with more severe early trauma and with attachment disturbances. At the other end, we would place the more biologically-based borderline cases, with comorbid bipolar, schizophrenic, ADHD, organic injuries, etc. The attachment-based group is placed in the middle. We thus roughly distinguish three subgroups of BPD patients, in which the various etiological factors have different weights (see Figure 2).

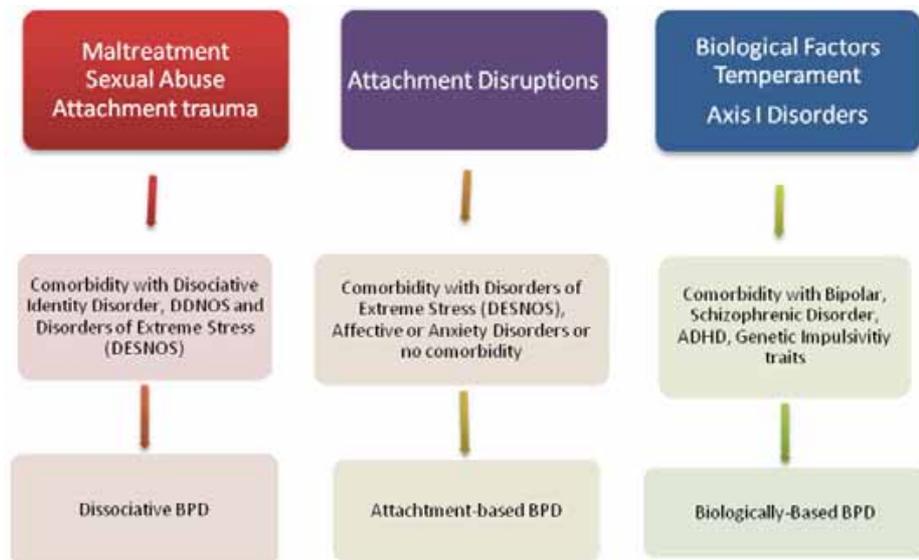
A first group consists of patients with comorbid BPD and dissociative disorders. These patients have a history of chronic childhood traumatization, and the dissociation of their personality symptoms would be at the level of secondary or tertiary structural dissociation. A second group consists of BPD patients with no dissociative disorder diagnosis. This group would probably overlap with the so-called disorders of extreme stress or Complex PTSD, and would have a relationship with early, chronic trauma and environmental factors related to dysfunctional attachment with primary caregivers. As Van der Hart, Nijenhuis and Steele (2005) argue with regard to Complex PTSD, dissociation in these cases is at the level of secondary structural dissociation. A third group of patients have BPD with comorbid disorders of a more biological nature, such as bipolar disorder, the schizophrenic spectrum or ADHD. These more biological disorders may interact, in complex ways, with environmental factors, or function themselves as traumatic experiences (Goldberg & Garino, 2009). Some patients with atypical presentations of biological disorders, can be wrongly diagnosed as BPD because of the observable behaviors and symptoms (this would be the end of the spectrum, see Figure 1). In most of these cases, however, biological aspects and environmental factors can interact in complex ways that manifest in a true comorbidity. It should be noted, however, that, because of their innate behavioral characteristics, children that eventually will belong to this third group can also evoke parental attachment disruptions, such as severe misattunements. These children may demand the utmost of their parents, who sometimes share common genetic features or deficits with their children.

As we mentioned before, some severely traumatized individuals can meet BPD criteria and also meet criteria for a complex dissociative disorder. However, in some cases, symptoms interpreted as borderline manifestations can be better explained as belonging to a complex dissociative disorder and do not represent actual comorbidity. For example, a DID patient presented high impulsivity which manifests in a self-harming behavior, which actually related to the activation of an emotional part of the personality. When we worked with the internal system of dissociative parts, this symptom disappeared. After this, the patient no longer manifested impulsive reactions. In this case, we have a DID diagnosis, and the apparently "comorbid" symptom of impulsivity was only a manifestation of the dissociative disorder. From the TSDP perspective, the various manifestations are inseparable. In other cases of true comorbidity where there are dissociative parts, and having worked effectively with them, the impulsivity is a character trait that remains present. This differentiation is far from being clear, and indeed, when we are working from the perspective of structural dissociation underlying both phenomena, this differential diagnosis may not be crucial to the treatment strategy. The more relevant question is assessing when a biological

factor (genetically based impulsivity, for example) is present, because of the need for a complementary pharmacological treatment.

In a similar way, some patients from the bipolar or schizophrenic end of the spectrum are misdiagnosed as borderline when the clinical features look like they meet BPD criteria. But in the majority of the BPD spectrum of cases, trauma, attachment and biological factors will interact in a complex way that will manifest differently in each patient. What is essential is the need to understand the relative contribution of each of these factors to a specific problem in a patient, because many aspects of treatment, such as pharmacological interventions or EMDR therapy, would need to have more weight depending on this evaluation. We think that it is important not to consider these factors as contradictory with each other, but rather complementary and interactive. Thus, to draw environmental and biological factors as extremes of a spectrum, as we did, is not entirely adequate, because these factors are not mutually exclusive and it is possible to find cases with high weights of both biological and environmental factors.

**Figure 2. Groups of Borderline Personality Disorder**



We could understand the existence of a continuum from secure attachment (right part of red arrow), passing through attachment disruptions, to severe traumatization. At another level biologic-genetic factors could be stronger at one extreme, and practically absent at the other, with an intermediate possibility where genetically determined temperament generates interacting with other factors to develop in character traits. This representation is not exact, because a strong genetic basis can be present (at the same time) in a severely traumatizing environment. All the combinations are possible, forming specific individual configurations.

The clinic cases described below are examples of each subgroup, representing its most relevant factor. However, the most common situation consists of the coexistence of various factors, with different degrees of influence in each individual.

According TSDP, the origin of borderline symptomatology lies in attachment trauma. However, TSDP can explain cases of BPD in the three groups, i.e., not only in the first, most evident one. We will describe the differences among the three groups mentioned before. Innate behavioral characteristics can evoke parental attachment disruptions and attachment based BPD may involve traumatization, often of “hidden” nature.

The first group, of “dissociative BPD”, comprises of BPD patients with tertiary or secondary structural dissociation, with dissociative parts of the personality that have a more developed first-person perspective, and in some cases even names or ages that differ from the main part (the main ANP). Some of these parts may believe that they are different people. In the intermediate group of “attachment-based BPD”, the underlying personality structure is the same (usually secondary structural dissociation), but the dissociative parts have less developed first-person perspectives, and the patient can only notice dramatic changes in emotions, behaviors or cognitions, without an inner experience of “having parts”, and general changes in elements constitut-

ing identity. The third group (“biologic BPD”) helps us to understand the complex interaction between more biologically-based elements and trauma history, and how the environmental and structural brain aspects are modulated or aggravated by early attachment relationships.

In their article on a proposed class of Posttraumatic Personality Disorders, Classen, Pain, Field and Woods (2006) suggested to keep the name BPD for people with early disorganized attachment (D-attachment) with primary caregivers but with less chronic childhood abuse. This category is rather similar to the BPD group that we have named “attachment-based BPD”. From a TSDP perspective, both are characterized by some degree of structural dissociation, that is based on early attachment-trauma and other forms of trauma.

In the following section we present three clinical cases that highlight the differences between the “Dissociative BPD”, the “Attachment-based BPD,” and the “Organic BPD”.

### **Case 1. “Dissociative Borderline Personality Disorder”**

Isabel, age 28, was diagnosed as BPD and later as DID, which involves Tertiary Structural Dissociation. She presented with self-harming behaviors, anorexic features, changes in behavior, unstable relationships, identity problems, and psychotic-like symptoms (auditory hallucinations). This woman hid the majority of her symptoms or minimized them in the therapy sessions. With time and a more detailed exploration, it became evident that she suffered from major amnesia and that she had a number of dissociative parts dealing with different aspects of daily life. One part was an efficient teacher (ANP-1), and as this part she couldn’t remember anything about what she had done the past weekend with her friends (when ANP-2 had been active). These parts each had an elaborated first-person perspective. A complex inner system of dissociative parts (EPs) become evident during the therapy, with less elaborated first-person perspectives, and many borderline symptoms could be understood as manifestations of her dissociative identity disorder. For instance, her unstable relationships resulted from different parts of personality relating to different people, with hostile parts pushing the patient to relate with potentially damaging men. Her auditory hallucinations were intrusions of several emotional parts, and her self-harming behaviors represented aggressions from some parts against others.

### **Case 2. “Attachment-based Borderline Personality Disorder”**

Mirta, age 42, was a woman without a severe trauma history but an ambivalent attachment with primary caregivers and with personality traits of impulsivity. She experienced severe emotion dysregulation with a tendency to hyperarousal. In some moments she could be functional, but at other times she acted in a more dependent style and was unable to do things by herself. In these moments she behaved in a child-like way, with emotions that were connected with early experiences of lack of affection by her parents and the anxiety related to her father’s problems with alcohol. At other times she behaved like an adolescent, for example, falling intensely in love with different men. In those moments when she shifted into different modes of behavior, she did not have the inner experience of being a different person or having a different identity. Instead, she described herself as acting and feeling “as a little child” or an “adolescent”. The resources she displayed at other times, in other areas of her life were not accessible for her when these mental states, which may be understood as dissociative parts, were activated. She did not have the ability to modulate these parts of the personality or the change between them. Instead she used cocaine and other drugs to achieve those changes, for instance to decrease the fear of loneliness connected with the “little child part”. These emotional parts were not so well defined, with less elaborated first-person perspectives, than in the previous case. Rather, she described the behaviors done in these states as “not me” and “I can’t understand why I did such crazy things!”. This structure could be characterized as secondary structural dissociation of the personality.

### **Case 3. “Biologic Borderline Personality Disorder”**

Lucia, age 48, was diagnosed as BPD for 10 years. She presented mood changes,

with recurrent and short-length depressive states. Her interpersonal relationships were unstable. She had a problematic marriage (which she tolerated because of her fear of being abandoned) and no social support. Self-harming behaviors and suicide attempts were frequent. She had a demanding and dependent attitude with her previous therapists. After some years of chronic depressive symptoms, she presented a clear manic episode. A further depressive state was followed by a new manic phase with psychotic symptoms incongruent with the affect. With a combination of antidepressant drugs, mood stabilizers and neuroleptic medication, many “personality” features changed. Her emotional dysregulation and self-harming behaviors were strongly reduced. In this example it is difficult to establish which symptoms were due to sub-clinical mood oscillations and which were related to personality features, because so many years living with the consequences of her disease caused so much secondary traumatization.

#### **Case 4. “All-in-one”**

Julio, age 41, presented mood changes, high impulsivity, risk behaviors, identity disturbances, and unstable relationships. His family of origin was dysfunctional, his mother was emotionally very distant and frequently neglectful, and his father was frequently absent and emotionally and physically abusive when he was present. Julio presented behavior problems during his childhood. He met criteria for adult Attention Deficit Hyperactivity Disorder (ADHD) with low maintained attention and high impulsivity and hyperactivity. His mother also met ADHD criteria, she presented an extreme lack of attention, and this characteristic probably influenced her neglectful care. His father was very impulsive, but with normal attention. All these factors in both parents may have influenced the patient’s early development: the negative genetic influence can be increased by the attachment style and the effects of emotional and physical maltreatment. He frequently presented signs of structural dissociation, alternating between an attachment-dependant part (EP) which desperately needed intimate relationships, an aggressive EP (facilitated by alcohol use) and a depressive EP (linked with a self-defeating features), which alternated with an ANP with narcissistic features. Thus, Julio was characterized by secondary structural dissociation.

### **OTHER APPROACHES TO THE DISSOCIATIVE NATURE OF BPD**

The theory of structural dissociation of the personality (TSDP) is not the only theoretical approach that emphasizes the dissociative features of BPD. Some authors even have described all personality disorders in terms of dissociation. Bromberg (1998), for instance, states that:

“Personality disorder” represents ego-syntonic dissociation no matter what personality style it embodies... A dissociative disorder proper (...) is from this vantage point a touchstone for understanding all other personality disorders. (pp. 201-202)

Other authors also describe concepts which are similar to those of TSDP. Blizard (2003) and Howell (2002, 2005) conceive BPD as a dissociative disorder with “a significant pattern of dissociated self-states” (Howell, 2002), i.e., masochistic/victim ego states or self-states and sadistic self-states, also labeled as rageful/perpetrator self-states or abuser self-states. These “self-states” are equivalent to the TSDP concept of “dissociative parts of the personality”. We prefer the term “dissociative parts” because they can be complex and comprise different mental states at different times (Van der Hart et al., 2006/2008). Lieb, Zanarini, Schmahl, Linehan and Bohus (2004) state that patients with BPD: “often move from one interpersonally reactive mood state to another, with great rapidity and fluidity, experiencing several dysphoric states and periods of euthymia during the course of one day”, a statement which implies dissociation.

Some models of BPD involve a dissociative perspective that shows similarities with TSDP. Cognitive analytic therapy (Ryle, 1997), for instance, describes the connection between early trauma, caregiving styles and borderline pathology. The related model of borderline functioning—the multiple self states model (MSSM)—explains many of the features of BPD in terms of the alternating dominance of one or other of a small range of “partially dissociated” self-states (Ryle, 1997). These self states are the equiv-

alent of the dissociative parts of the personality. Golyunkina and Ryle observed that “between these states there may be impaired memory but complete amnesia is rare, and some capacity for self-observation across all, or nearly all states is present” (p. 431). Ryle (2007) stated that BPD patients manifest major discontinuities in their experience and behavior, and these contribute to the difficulties of clinicians seeking to treat them. In his view, the underlying problem is one of structural dissociation of self processes into a small range of partially dissociated self-states, the switches between which can be abrupt and evidently unprovoked. It is obvious that this view has much in common with TSDP, which more clearly emphasized the first-person perspective of dissociative parts. Some examples of the types of self-states described by Golyunkina and Ryle (1999) are: an ideal self (“others admire me”), an abuser rage state (“I want to hurt others”), a powerless victim (“others attack me and I am weak”) and a zombie state. TSDP relates these different self-states or dissociative parts are mediated by different action (sub)systems: for instance, the abuser rage part is mediated by the fight defense subsystem, and the powerless victim by the submissive defense action subsystem.

Ryle and Kerr (2006) define the Reciprocal Role Procedure as an underlying concept in what he calls the Multiple Self States Model of BPD (MSSM). Procedures are sequences of perception, appraisal, action and evaluation of the consequences shaping aim-directed action. Each role is identifiable by its characteristic behavior, mood, symptoms, view of self and others, and sought-for reciprocation, that links with the TSDP concept of the first-person perspective of dissociative parts.

Another approach which links early experiences with adult systems managing concepts very closed to TSDP is the Schema Therapy for BPD (Young, Klosko, & Weishaar, 2003). Young and colleagues observe that BPD patients are characterized by the existence of different “parts of the self” that they re-labeled as “modes”. They identify four main types: child modes, maladaptive coping modes, dysfunctional parent modes and health adult mode. They state that: “In patients with borderline or narcissistic disorders, the modes are relatively disconnected, and the person is capable of experiencing only one mode at a time. Patients with BPD switch rapidly from mode to mode” (p. 272). This switching between different modes is equivalent to the alternation between EPs and ANPs as described by TSDP. In both theories, some modes or dissociative parts can themselves dissociate in subparts. One of the differentiations that Young and colleagues made pertains to the child modes: the vulnerable child, the angry child, the impulsive/undisciplined and the happy child. Again, TSDP argues that these different parts, some of which may be described as EPs, are mediated by different action (sub)systems, may have different levels of mental development, and hold different (aspects of) traumatic memories. Young and colleagues distinguish a Healthy Adult Mode, which does not seem to be similar to ANP. The authors observe that this mode is virtually absent in many borderline patients; thus, it would be something to strive for the course of therapy. However, according to TSDP some ANPs may be highly functional (see also Horevitz & Loewenstein, 1994), comparable to Young and colleagues’ Healthy Adult Mode. But however healthy ANP’s functioning seems to be, it is still a dissociative part of the personality which has not integrated other parts. Once the personality is fully integrated, TSDP would speak of a healthy personality with a good capacity for self-reflection, insight and self-regulation.

Finally, another relevant author in BPD conceptualization is Otto Kernberg (1993). In Transference Focused Psychotherapy, he describes a developmentally based theory of Borderline Personality Organization (Levy et al, 2006), conceptualized in terms of unintegrated and undifferentiated affects and representations of self and other, which may have some similarities with the dissociative parts described in TSDP. Partial representations of self and other are paired and linked by an affect in mental units that Kernberg calls object relation dyads. In borderlines these dyads are not integrated and totally negative representations are split off/segregated from idealized positive representations of self and other. The mechanism of change in patients treated with Transference Focused Psychotherapy is the integration of these polarized affect states and representations of self and other into a more coherent whole, this integration being a shared goal with TSDP therapeutic approach.

Kernberg (1993) proposes several developmental tasks for borderline patients. They should become able to make a distinction between what is self (and own experience) and what is others (and their experience). This concept is present in TSDP

which establishes the relevance of differentiation and synthesis. The concept of synthesis in TSDP is similar to Kernberg's (1993) second developmental task of overcoming splitting: the borderline patients should re-learn to see objects as a whole, both good and bad at the same time. Similarities between both theories are not so close as those from Ryle & Kerr (2006) and Young, Klosko, & Weishaar (2003), but some parallels can be found.

In summary, many conceptualizations of BPD refer, in different ways, to the dissociation of the personality in BPD patients, which is most elaborated in TSDP. Various authors emphasized the role of early and severe childhood traumatization and insecure attachment in the development of BPD. They mentioned the switching between unintegrated mental states (dissociative parts) in BPD patients. Some of these parts appear apparently functional in daily life (ANPs), other parts are linked to traumatic experiences (EPs). TSDP offers a comprehensive vision of all these aspects, integrating findings and insights from neurobiology and psychotraumatology.

### DSM-IV-TR BPD CRITERIA VIEWED AS POSTTRAUMATIC DISSOCIATIVE SYMPTOMS

As Van der Hart, Nijenhuis and Steele (2005) did with regard to the symptom clusters of Complex PTSD/DESNOS, below we describe how the main symptoms of BPD can be understood from TSDP's perspective, i.e., as being related to various dissociative parts of the personality, notably those mediated by defense action subsystems (EPs).

#### 1. Frantic efforts to avoid real or imagined abandonment

Many people with BPD maintain they have a very hard time when they are alone, even for very short periods of time. Others claim they feel alone even when surrounded by others. The fear of being alone makes them especially vulnerable to abandonment "signals" which are easily triggered by relational stimuli or by situations perceived as dangerous. Feeling ignored or rejected can unleash very intense emotional reactions in patients with this diagnosis. Although most people can feel bad when they are afraid of being abandoned and can react in many different ways in the face of loss, it is not frequent that these reactions reach the extremes that can be observed in borderline patients (Mosquera, 2004, 2010). These features can be understood from the TSDP as different EPs getting triggered by traumatic memories and experiences. If the patient has had an attachment figure who was neglectful, the need of attachment could be extreme, and when faced with the possibility of losing an attachment figure, the EP mediated by the attachment cry action system gets activated (being expressed in the adult borderline as "don't leave me"). But in insecure early attachment, defensive action systems should be activated with the primary caregiver, and this is now similarly activated with adult attachment figures with a fight EP ("I hate you") that can turn against the ANP ("if you leave me I will kill myself"). With a disorganized-disoriented attachment this situation is more extreme and dissociative parts tend to have more self-person perspective. This situation would be more related with the dissociative BPD group than other types of insecure attachment.

The presence of a strong biological basis could function as a multiplicative factor, increasing the effect of – in different circumstances – minor attachment problems. For example the lack of emotional regulatory capacities can make difficult to tolerate disturbing emotions coming from loneliness and loss, and impulsivity can increase disruptive behaviors oriented to recover the lost love. During childhood, these extreme reactions can exacerbate difficulties from the caregiver to safely attach "this so difficult child", in a circular causation.

#### 2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation

Borderline patients are known for maintaining intense interpersonal relations, usually very volatile and problematic relations. Certainly it is hard to understand how statements like "leave me alone" and "I never want to see you again" can really mean "please don't leave me, I need you". Although this might be evident to others, border-

lines are not always aware of this “lack of connection” between what they “feel and need” and what they “do and say”. This is one of the reasons why many borderlines feel confused and puzzled by the reactions they get from others and vice versa (Mosquera, 2004, 2010).

Borderline patients can idealize those that take care of them, even people they just met – especially when they perceive a “special connection”, when they feel cared for, listened to or valued (Mosquera, 2010). Frequently, to meet their attachment needs, the children have filtered the negative aspects in the caregiver, constructing an idealized figure. When these negative aspects became undeniable (for example, during abuse) different defensive action systems could be simultaneously activated and blocked, to give way to reactions judged as more efficient to survive (like submission or collapse). All these reactions, even those never acted out, stem from EPs. Their perceptions of and actions toward significant others, such as idealization, rage (fight), fear and avoidance (flight) or submission are based on different action (sub)systems that are not integrated due to the child originally having to deal with inconsistent or harmful caregiver behaviors. In adult intimate relationships, including the therapeutic relationship, this alternation between ANP (or ANPs) and different EPs is reproduced.

Borderline patients can switch quite fast between the activation of EPs as defensive and attachment action systems and they can pass from idealization to devaluation if they think they are being ignored, not cared for or rejected (activation of attachment cry EP). A very small detail can trigger a profound sense of betrayal and emotional pain. This apparently small detail can be a reminiscence of a very relevant detail in the relationship with primary caregivers. That is, the apparent disproportion in the reaction can reflect that the patient as EP(s) is not actually reacting to the here and now situation, but to the there and then one. In other words, the patient lives in trauma time (Van der Hart et al., 2010). For a little child yelling, criticism or hostile attitudes are not a minor experience. When this child becomes an adult, any high tone of voice or critical comment can trigger an apparently unjustified reaction. These contradictory reactions in intimate relationships may relate to a disorganized D attachment that the individual developed in childhood. This external disorganization may be the outward manifestation of competition among rigidly organized dissociative parts that are mediated by defense and attachment systems, respectively. These parts have contradictory approaches to solving the dilemma of relating to an unpredictable and unsafe, but needed caregiver (Liotti, 1999; Van der Hart et al., 2006/2008).

A related factor that complicates BPD patients’ relations with others is the tendency to personalize other’s reactions and comments and to interpret them as something “against them” (like an attack). They are usually afraid of being “found out” (in many cases because the abuser did a very good job making them feel guilty, “bad”, unlovable, etc.), so any possible sign of rejection can activate very strong reactions in EPs. A submissive EP (“I am weak”) can be activated when a perceived rejection or reminder of an early emotional neglect takes place. However, at the same time an enraged EP – mediated by the fight action subsystem – may react violently to the other person.

### **3. Identity disturbance: markedly and persistently unstable self-image or sense of self**

Frequently borderlines refer to not knowing who they are, what they like or what they would like to do. A low integrative capacity and the inner experience of changes in mental states, i.e., a switching between different EPs and ANP, can be a phenomenological basis for this identity disturbance. This can lead them to embark on projects and establish objectives that are hard to accomplish. The low level of mental efficiency (Van der Hart, Nijenhuis & Steele, 2006/2008) can contribute to their difficulties to engage in adaptive activities. Many borderlines say they lack an identity and often say phrases like “I know how I should be, what I should do, what would be normal to feel but I am incapable”. This consciousness of “being strange” makes them feel guilty and frustrated. When preoccupied patients do not have a well-defined identity and cannot find an explanation to their suffering, they look for “cues” in others: anything that can explain their confusion and uncertainty, anything that helps them feel less guilty and might help others understand them. This can be related to one of the phenomena that can be easily observed in BPD patients during hospitalization: mimicking. Borderline patients frequently “copy” symptoms from others. Many feel overwhelmed by simple

questions such as “How would you describe yourself?” and “What do you like to do?” (Mosquera, 2010)

Borderline patients show a tendency to do what others expect. As children they did not learn to think about themselves and their needs; they had to act according to other’s needs. They tend to act / react according to their perceptions of other’s needs and opinions. Their extreme need of attachment can be another reason for this way of functioning.

Borderlines frequently say they feel “fake” or “phony”; for this reason they adopt apparently normal facades (the apparently normal part of the personality, ANP). They tend to create masks and try to act as they think others want them to act. A patient said: “I feel like a clown who is always acting for the gallery; I always have a smile and pretend I’m ok so I don’t have any problems with others; I feel I cannot express what I feel because others wouldn’t understand” (Mosquera, 2010). We must comment that some borderlines are aware of their efforts to make a facade of apparent competence but in more dissociative cases, they are not aware of the existence of EPs while being in “ANP mode”. This may reflect ANP’s avoidance of traumatic elements contained in the EPs and the absence of realization of trauma and trauma-derived mental actions characteristic of early traumatization (Van der Hart, Nijenhuis & Steele, 2006/2008).

#### **4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating)**

Biological and environmental factors may contribute to these symptoms. A person may have an impulsivity personality trait, genetically inherited from his father. This impulsivity trait cannot be adequately regulated by the impulsive father, who overreacts to his son’s behaviors, or by the mother, who is victimized by the father’s abusive-impulsive behaviors. When the young child expresses rage, it is consistently repressed in response to the overcontrolling parents, and this contributes to the dissociation of this mental state from others. When this child becomes an adult, he may oscillate between an ANP rigidly controlling his rage, or expressing it in an uncontrolled way (EP) when he needs to express rage. The adaptive anger that allows people to search for their necessities or enable them to refuse an abusive demand is not an option for this person, because highly developed integrative processes are absent.

Some borderline patients turn to substance abuse and self-medication as a way to avoid getting in touch with EP’s feelings and reactivates traumatic memories. Others resort to binge eating, since this may create a stuporous state that allows the avoidance of EP. In other patients, impulsivity reflects an uncontrollable need in an EP, a need that in most of them was not recognized and satisfied during childhood. These patients learned to ignore or rigidly control this need, which remains dissociated in an EP. Some borderline patients manifest compulsive sexuality, which sometimes can be a reenactment of an early sexual abuse. Such reenactments involve an EP that imitates the original perpetrator and at least one other EP that suffered the pain, fear and shame of the original abuse. This behavior is not always related with sexual abuse, for example a child EP can tend to reenact a relationship with a verbally abusive parent, with an absence of mindsight in sexual partner which reproduces the same pattern from early caregivers, while the ANP suffers for being trapped in degrading relationships. Many different impulsive behaviors can be understood as EP activations which escape from ANP’s rigid control.

#### **5. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior**

Suicidal behavior, gestures or self mutilating behavior are usually interpreted as blackmail or manipulative behavior. However, in most cases the patients, as ANP or as a controlling EP resorts to these behaviors in order to manage vehement or unbearable emotions. Many borderline patients report feeling better when they cut or burn. Unbearable emotional pain together with the anticipation of the danger of self-injury may induce an increase of endorphins – secondary to states of derealization – which decreases pain awareness, reduces emotional distress and induces analgesia. In other cases, the reason for self-injury is to cause physical pain because the patient find this

physical pain “more bearable than emotional pain” (contained in EPs).

In more complex dissociative cases, some punishing EPs may be involved in the acts of self-harm with the goal to punish other parts, for instance, they consider these parts to be guilty of the abuse (because their submissive response), as experienced in reactivated traumatic memories, or to be weak (hostile parts consider that to be strong is the only way for not being abused anymore). The punishing EPs may also express themselves as intrusive thoughts or voices that blame or threaten the ANP or another EP. Borderline patients may resort to self-harm with different levels of planning, ranging from highly impulsive to carefully planned actions. Furthermore, in some cases ANP is completely present and aware of these actions. In other cases, one or more EPs may have taken over executive control to such a degree that ANP’s presence is completely inhibited, with the result that ANP has amnesia for the triggers, the intention and planning to self-harm and/or the act of self-harm itself. It is possible that an observing part (EP) simultaneously watches from a distance what is being done.

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

Borderline patients present an affective instability that has an effect on many areas of their life and can be manifested by abrupt changes in emotional states. Many of these patients are characterized by chronic dysphoria and feelings of emptiness. They are easily triggered by ordinary events that remind them of traumatic experiences or unresolved conflicts. Then their tendency toward feeling empty and “flat” may be interrupted by episodes of rage, anguish and desperation, in which various EPs are highly present. It is important to keep in mind that apparently ordinary events, that can actually function as “triggers” because of their perceived similarities with the original traumatizing events, may reactivate traumatic memories and EPs to which these memories belong. This can generate shifts between ANP and EP that explain many of the dramatic mood changes (Steele, 2008; Mosquera & Gonzalez, 2009a; Mosquera, Gonzalez, & Van der Hart, 2010).

For example, a female borderline patient can oscillate between thinking that her partner is maltreating her (while feeling hurt or rage) and being certain she “cannot live without him” when faced with the menace of being alone. This patient can manifest very rapid and intense changes in her affect, reacting in diverse ways that both she and other find confusing. When she perceives that her partner is mistreating her, she can be re-experiencing a past aggression by her father in childhood, with a mixture of rage (fight-based EP) and fear (flight-based EP). When she shifts to the belief “I cannot live without him,” she may be shifting to a submissive EP or an attachment cry-based EP. In secondary structural dissociation, these EPs are not very complex and their first-person perspective is not well-developed. The patient as ANP may be aware of these changes; when, for example, she is in touch with the child EP that feels “I cannot believe without him”, she may experience the fight EP’s enraged reaction as “not me”.

Borderline patients are known for their “black and white” thinking. These extremes are characteristic of structural dissociation of the personality, with different dissociative parts having polarized perceptions, thoughts, emotions, and behavioral actions. When they feel disheartened, they can react with rage and direct their feelings towards others (for example with verbal assaults) or towards themselves (cutting, burning).

Emotion dysregulation is another factor that needs to be considered related with this symptom cluster. People with a background of early chronic traumatization, attachment trauma or attachment disturbances have difficulties maintaining their emotions within a window of tolerance (Ogden & Minton, 2000; Ogden, Minton, & Pain, 2006). They can become uncontrollably hyperaroused or hypoaroused. Emotional dysregulation can be partially inheritable (Goldsmith & Harman, 1994), but this trait will be either amplified by an inadequate caregiver or moderated by a safe and supportive caregiver. During traumatizing experiences, EPs may become hyperaroused (rage, extreme fear, panic) or hypoaroused (total submission), manifesting these respective conditions whenever they are reactivated. When the caretaker is unable to regulate the child’s extreme experiences or even is the cause of them, these dissociative parts become all the more rigid and entrenched.

For many authors, this criterion seems to have a stronger biological weight, one which would respond best to pharmacological treatment. However, it would be a mistake to ignore the presence of external and relational factors in the patient's past and present relationships that influence the tendency of most borderline patients to be overly reactive.

### **7. Chronic feelings of emptiness**

Emptiness is a chronic feeling in most borderline patients which they usually try to attenuate. Patients characterized by chronic feelings of emptiness may report how they make desperate efforts to fill their overwhelming emptiness. Some patients report that these sensations make them feel very dependent on other people (believing only others can fill up this emptiness). Sometimes this feeling of emptiness represents EPs, dissociative parts that contain experiences of emotional neglect, distancing or withdrawing from the caregiver and their unmet attachment needs. These patients report a feeling of emptiness that they "cannot fill with anything". Sometimes a lack of affect relates to ANP's desperate attempts to avoid any feeling or bodily sensation that could trigger traumatic memories and overwhelming affect, leading to a life "lived at the surface of consciousness" (Appelfeld, 1994; Van der Hart, Nijenhuis, & Steele, 2006/2008).

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

Many borderline patients show unpredictable reactions and sudden "emotional outbursts". These outbursts can be verbal, physical or a combination of both (Mosquera, 2010). In some cases, this will depend on which EP is reactivated. Anger outbursts by "Fight EPs", related to reactivated traumatic memories, can be quite intense and have a deep impact on the patient as ANP and other EPs and on other people. The person might give the impression of being totally out of control, "dislocated", acting on impulses without thinking of consequences. The patient as ANP can experience those reactions as "not me" (reflecting a certain level of first-person perspective) or cannot remember part of, or the entire episode. Then, the patient as ANP may feel very scared or humiliated when others tell them what has happened.

### **9. Transient, stress-related paranoid ideation or severe dissociative symptoms**

In our opinion, transient stress-related paranoid ideation is crucial in BPD, since, as we mentioned before, it is the source of many apparently out-of-proportion and uncontrolled reactions. In our view, it reflects switches between dissociative parts, with their own first-person perspectives. Some borderline patients are extremely vulnerable and sensitive to general stimuli, having general difficulties in regulating their emotional states. However, apparently insignificant stimuli often actually function as specific trauma-related triggers. Therapists begin to understand their significance when they are able to relate them to the patient's early traumatic experiences. The extreme lack of trust that can be observed in many borderline patients when they are emotionally activated can be related to posttraumatic hyperarousal. In moments of extreme stress they, or rather EPs stuck in trauma-related defense, can become quite suspicious and imagine other want to harm them: this is usually related to early attachment experiences, neglect and abuse. In these cases, then, traumatic memories and related EPs may be reactivated (see also Chan & Silove, 2000). For example, a familiar, trusted person may suddenly be perceived as an attacker (due to a switch to a defensive EP).

Auditory hallucinations can be included under "severe dissociative symptoms" (Yee, Korner, McSwiggan, Mearns & Stevenson, 2005; Moskowitz & Corstens, 2007; Chan & Silove, 2000). Those auditory hallucinations usually are related to specific EPs with their own, well developed first-person perspective that may intrude into the ANP's consciousness or completely take over executive control (Moskowitz, & Corstens, 2007; Van der Hart & Witztum, 2008). It is as intrusive auditory hallucinations that some defensive EPs are experienced by the ANP. Other severe dissociative

symptoms may be among those that are measured by screening instruments for dissociative disorders (DES: Bernstein & Putnam, 1986; DES-T: Waller, Putnam & Carlson, 1996; SDQ-20: Nijenhuis et al., 1996) and structured diagnostic instruments for the DSM-IV-TR dissociative disorders (MID: Dell, 2006; DDIS: Ross, 1989; SCID-D: Steinberg, 1994). In short, they involve intrusions from or switches among dissociative parts and can be categorized as negative (functional losses such as amnesia and paralysis) or positive (intrusions such as flashbacks or voices), and psychoform (symptoms such as amnesia, hearing voices) or somatoform (symptoms such as anesthesia or tics) (Van der Hart et al., 2006/2008).

### CLINICAL EXAMPLES IN TERMS OF STRUCTURAL DISSOCIATION OF THE PERSONALITY

The case vignettes presented below may help the reader to become more sensitive to the possible involvement of dissociative parts in BPD patients' functioning and symptoms. This may open windows of opportunity for more effective management and treatment. These issues are, however, beyond the scope of this article.

#### Case 1: "Dissociative Borderline Personality Disorder"

Susan was a 45 year old borderline woman. She was apparently functional. Her disclosure of childhood sexual abuse fit with some behaviors described by her family: as a child she washed her underwear on several occasions and seemed embarrassed like she was hiding something, but mother thought she was "playing house wife". Since she was a little child, she was threatened by the perpetrator in different ways "if you say something, they won't love you", "if you tell, they won't believe you and you will be left alone", "If you tell, I will kill your kitten". Still, she was able to finish college and get a job (ANP). In her job she was meticulous and very responsible (ANP). She was usually quiet and calm, and sometimes very submissive (EP1) but had several anger outbursts with co-workers (EP2). She had a small group of friends, linked to spiritual beliefs. She had no conflict in this context (ANP). In some situations she (EP3) felt "overloaded" by some comments and gestures from people, that she (as ANP) experienced as out of proportion to those events. On several occasions, she "punished" herself, introducing objects in her vagina and cutting herself (EP2 interfering in the functioning of the ANP). She was very ashamed and did not understand "why I (EP2) did that to myself" (ANP).

#### Case 2: "Dissociative Borderline Personality Disorder"

Robert is a 37 year old borderline man. Usually easy going, he did not like conflicts and avoided them (ANP). He referred to a very good childhood, but had very few memories from the period before his adolescence, and could not offer any details about that time. A few months ago, he was shocked when he realized (ANP) he began hitting an old man (EP). He didn't know "what got into myself" and was very ashamed and worried about his reaction (ANP). He described several situations similar to this incident, most of them related to a previous stressor. He described alcohol abuse as a kind of self-medication (to numb the emotional pain). His wife explained that he (an enraged, fight-based EP) tried to kill himself after those "out of control outbursts" (childhood, fearful, flight-based EP); Robert (ANP) stated that he felt guilty and was "afraid of my own reactions".

#### Case 3: "Attachment-Based Borderline Personality Disorder"

Claudia was an apparently functional 29 year old woman with BPD. Her mother explained the following: "Other people don't know she has problems... when she is ok she is wonderful, charming, calm, patient (ANP). However, "suddenly", she becomes an awful person. She is aggressive, self-destructive and very hard to soothe. In those moments I just hate her, she is impossible to handle" (EP). The patient went to work on a daily basis; she did well, related to co-workers and had no conflicts (ANP). When there was a conflict at her work, she came home very agitated and it was hard not to argue with her. "She said, I never help her but she is the one that doesn't want

help” (mother and daughter usually argued and ended up blaming and cursing each other) “. When Claudia was overwhelmed, she went to the bathroom and cut (EP) or went out and had “several drinks” (EP). Outside her work, her life was chaotic and unpredictable; she maintained intense and unstable relationships. She did not understand “certain reactions” (EP) and explained that although she knew she should “*stop my behavior*”, in certain moments, “I can’t” (ANP): “I don’t know why I do those things, it’s as if it wasn’t me in those moments”.

#### **Case 4: “Biologic Borderline Personality Disorder and Attachment Trauma”**

Elisa, 27 years old, was very afraid of abandonment. She was extremely dependent and possessive (EP) most of the time, tried to please others and be liked. From time to time, she became extremely violent and hostile (EP), showing resentment toward her relatives for different reasons. Her relationship with her partner was very intense and oscillated between extreme dependence (attachment cry EP) and negative reactions toward him (fight-based EP). All these behaviors were exacerbated by a depressive mood, which initially seemed to be part of the personality disorder. The further occurrence of a manic episode with delusional symptoms, including paranoid attitude toward her partner, pointed to a diagnosis of bipolar disorder. Pharmacological stabilization reduced the intensity of behavioral problems, but her relationship continued to be problematic, and seemed to be connected with early attachment disturbances. Subsyndromal affective oscillations since her early adolescence generated many negative experiences, and contributed to a personal identity based on unstable relationships, intense emotional states and low self-regulation. Her mother presented a very disorganized pattern of attachment with the patient, alternating (or simultaneously showing) interest and rejection. The patient sometimes sought the mother’s help when she had problems with her partner (attachment cry EP) and, at other occasions, took legal actions towards the mother, asking the judge to establish a protective order against her (fight EP).

In general, what these cases teach us is that the therapist needs to understand which dissociative parts are active and when and find out what provokes their often symptomatic reactions. Often several EPs are involved, whose behaviors should be understood as attempts to solve certain emotional problems, such as coping with reactivated traumatic memories. Such understandings provide the foundation for specific therapeutic interventions that address the nature the patient’s inner experiences and, from there, lead to the development of more adaptive problem-solving strategies.

### **CONCLUSIONS**

The existent literature has increasingly emphasized dissociation as a major feature of traumatization. Thus, if BPD is (largely) a trauma-related disorder, it should be characterized by some degree of dissociation. In fact, as described in this article, several theoretical and clinical approaches emphasize the dissociative nature of BPD or describe related concepts. This conceptualization is relevant, not only for a better understanding but also for the purpose of more effective and efficient treatment of this severe condition.

The theory that received most attention in this article is the theory of structural dissociation of the personality, as we believe this is the more comprehensive theory about severe traumatization and it’s having increasing empirical support (e.g., Hermans, Nijenhuis, Van Honk, Huntjens, & Van der Hart, 2006; Reinders et al., 2003, 2006, 2008). Due to its categorical model the DSM-IV-TR criteria of BPD by themselves are too simple to provide an adequate understanding of the complexity of BPD. However, by drawing on the perspective of the theory of structural dissociation of the personality, clinicians and researchers can develop a deep understanding of the various symptoms and social interactions of BPD patients. It is extremely difficult to understand the meaning and purpose of these symptoms when therapists use only a here-and-now perspective. Thus, with the theory of structural dissociation as frame of reference, we have described how the various BPD symptom clusters can be understood as manifestations of the intrusions from, and/or switches, among, various dissociative parts of

the personality. Many of the apparently maladaptive actions these dissociative parts engage in should be regarded as attempted solutions in dealing with intolerable experiences, such as reactivated traumatic memories of childhood traumatization.

We have proposed three main types of BPD, in which these factors are involved in varying degrees: a dissociative BPD, an attachment-based BPD and an organic BPD. These subtypes are not an attempt to offer another system of categorical classification, but rather to emphasize the varying interrelations between genetics and environment, overall early trauma (including hidden attachment trauma). These three aspects can interrelate in complex ways, and manifest quite differently in each case. We believe insights into how these factors are influential in each case are crucial to case formulation and for planning comprehensive treatment.

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