ABNORMAL BODILY EXPERIENCE IN BORDERLINE PERSONALITY DISORDER: CLINICAL ISSUES AND PSYCHOPATHOLOGICAL PERSPECTIVES

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Abstract

Borderline personality disorder is one of the most controversial disorders in the contemporary psychopathological scenario. Despite its prevalence both in clinical settings and in nonclinical ones, BPD is far behind other major psychiatric disorders in awareness and research, remaining strongly stigmatized by mental health professionals themselves who want to avoid situations that are difficult to manage. Several consequences result from this "sidelining". The most serious one is that still little is known (or, rather, there is still little consensus) about BPD core psychopathology and its related neurobiology. This theoretical and clinical gap becomes particularly evident when a specific issue in borderline psychopathology is investigated: the bodily experience. This paper aims to fill the gap by presenting an overview on the topic. Through a review of recent literature conducted by narrowing down the search to PubMed articles published in the last ten years, we first describe the multifaceted abnormal bodily experience of borderline patients and then propose a key for understanding it. Some controversial points emerge from our search: a) Bodily experience in BPD is very complex and can manifest itself in different forms (i.e., self-harm and suicide, pain paradox, somatic symptoms and related disorders) and contexts (i.e., psychiatric and medical settings); b) Bodily experience in borderline patients has been little investigated over time; c) The existing literature on bodily experience in BPD is somehow "biased". Each of these points is discussed in detail and an attempt to organize all these data in a psychopathologically meaningful way is finally proposed.

Key words: borderline personality disorder, bodily experience, non-suicidal self-injury, pain perception, somatic symptoms

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Bodily experience in BPD: is there a literature bias?

Borderline personality disorder (BPD) is one of the most controversial disorders in the contemporary psychopathological scenario. Despite its prevalence both in clinical settings (20-25%) and in nonclinical ones (1.4-5.9%), it is far behind other major psychiatric disorders in terms of awareness and research (Gunderson and Links, 2008). "Borderline personality disorder is to psychiatry what psychiatry is to medicine", Gunderson (2009) states, meaning that BPD remains strongly stigmatized by mental health professionals themselves who want to avoid, or actively dislike, situations that are difficult to manage. Several consequences result from this "sidelining". The most relevant one is that still little is known (or, rather, there is still little consensus) about BPD core psychopathology and its related neurobiology.

This theoretical and clinical gap becomes more evident when a specific issue in borderline personality disorder is investigated: the bodily experience. Through a review of recent literature conducted by narrowing down the search to PubMed articles published in the last ten years (2005-2015), we found that only 114 articles refer to abnormal bodily experiences in BPD; of these, 80 (70%) are on self-injury and suicide, 17 (15%) on pain perception, 11 (10%) on somatic symptoms, and 6 (5%) on body dysmorphic disorder (BDD).

Going deeper, of the 80 regarding self-injury and suicide, 36 (45%) are on self-injurious behaviors, 24 (30%) on suicide, 20 (25%) on both self-injury and suicide; of the 17 regarding pain perception, 12 (70%) are on pain sensitivity, 3 (18%) on pain insensitivity during self-harm, and 2 (12%) on chronic pain; of the 11 regarding somatic symptoms, 7 (64%) are on primary care utilization, 2 (18%) on somatic preoccupations, and 2 (18%) on physical illness; of the 6 regarding BDD, 4 (67%) are on BDD and 2 (33%) on body image disturbances. Put together, these data highlight some issues: 1) Bodily experience in BPD is very complex and can manifest itself in different forms; 2) This topic has been little investigated over time; 3) The existing literature on this topic is somehow "biased". If the

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first two points are clear, the third one needs more explanation.

Paying close attention to these articles, one can see not only that most of them are on self-harm and suicide but even that those on self-harm and suicide are the most recent ones. This means that scientific research in the last years has mainly focused on some manifestations of bodily experience in BPD, leaving others aside. Where does this "bias" come from? There may be several reasons, of which two seem to be particularly relevant. First, from a clinical point of view, self-harm and suicide easily "steal the scene", being the most alarming and disconcerting behaviors that a borderline patient can enact; second, from a psychiatric and diagnostic point of view, DSM-5 (2013) has officially given more attention to these behaviors, including *Non-suicidal self-injury* (NSSI) and *Suicidal behavior disorder* (SBD) as conditions for further study (Section III).

Besides, there is another point to discuss. Of the above-mentioned 114 articles, 47 (41%) are by the same author: Randy A. Sansone (et al.). Sansone is also the author (together with Lori A. Sansone) of the only existing review on bodily experience in BPD covering a 360 degree perspective. In this review (2006), the authors describe various manifestations of abnormal bodily experience in individuals with borderline personality disorder as they might appear in both psychiatric and medical settings. However, they seem to use different terms for the same psychopathological concept throughout the paper, thus generating confusion rather than shedding light on the matter. For example, if Sansone and Sansone mainly refer to "body image disturbance" when talking about abnormal bodily experiences in BPD, they nonetheless mention "body dissatisfaction", "body conflict" or "body dysphoria", despite knowing that "these terms are not fully interchangeable" (Sansone and Sansone 2006, p. 132). Therefore, the issue of bodily experience in BPD is far from being solved. This paper stems from this psychopathological puzzle and aims to fill the gap, first by describing the multifaceted abnormal bodily experience of borderline patients and then by proposing a key for understanding it.

In search for relief. Non-suicidal self-injury and its multiple meanings

In recent years, non-suicidal self-injury (i.e., the act of deliberately procuring bodily injury, such as cutting or burning) has become an increasingly frequent phenomenon, so that it constitutes now a real social problem. According to a recent literature review by Klonsky and Muehlenkamp (2007), NSSI occurs in both clinical (ranging from 20% of adult psychiatric patients to 40-80% of adolescent psychiatric patients) and nonclinical population (ranging from 4% among adults up to 14-15% among adolescents and young adults), without significant differences between men and women, except for the methodology used (women tend to cut, men to burn or violently hitting).

Besides, although non-suicidal self-injurious behaviours are different from suicidal ones for phenomenology, features and intent, a considerable portion of self-injurers (50% in the community; 70% hospitalized) report at least one suicide attempt. For this reason, Nock (2009, 2014) proposes to consider self-injury and suicide as belonging to a same, broader, self-injurious spectrum *(Self-injurious thoughts and behaviors,* SITB), including, on the one side, *suicidal SITB* (with intent to die: *suicide ideation, suicide plan, preparatory acts* and *suicide attempt)* and, on the other, *non-suicidal SITB* (with no intent to die: *suicide threat/gesture, self-injury thoughts* and *self-injury*, including in turn *mild, moderate* and *severe* behaviors*)*. According to Gunderson and Links (2008), this self-injurious spectrum represents the "behavioural specialty" of BPD. In this paragraph we will mainly focus on non-suicidal self-injury (NSSI), trying to describe its phenomenology and its functions.

First of all, epidemiological data show that 70-75% of borderline patients enact self-injurious behaviours (Clarkin et al. 1983, Zisook et al. 1994, Kerr et al. 2010). The most common form of NSSI is cutting (80%), but also bruising (24%), burning (20%), head banging (15%) and biting (7%) seem to be frequent (Gunderson and Ridolfi 2001). Moreover, most BPD patients (90%) report a baseline history of self-harm; about 72% has a lifetime history of using multiple methods of self-injuring (the most common ones: cutting, punching themselves, punching walls, and head banging); the prevalence of self-harm declines significantly over time (during the ninth and tenth years post index admission, less than 18% of borderline patients report engaging in self-harm and less than 13% report two or more episodes; only cutting remains relatively common - about 14%) (Zanarini et al. 2008).

Why do BPD patients need to enact these risky behaviors? Research indicates that NSSI helps to regulate emotions in individuals with BPD (up to 96% of BPD patients who self-injure report relief from unpleasant emotions after self-injury) and is associated with the reduction of dissociative symptoms (Schearer 1994, Zanarini et al. 2008). Following this line of research and trying to get closer to the lived experience of these patients, we propose six "meaning-organizers" for understanding self-injury in BPD (Rossi Monti and D'Agostino 2009), which need further empirical support to be confirmed:

1) *To concretize.* NSSI as a way to turn a psychic pain, invisible and spiritual, in a physical pain, visible and material;
2) *To punish-to eradicate-to purify.* NSSI as means to punish a "bad" self, to attack thoughts, feelings, memories, or to unconsciously repeat emotional sequences recalling traumatic stories of childhood abuses;
3) *To regulate dysphoria.* NSSI as a way of controlling an unbearable emotional state made of tension, irritability, confusion, and urge to act, or interrupting the depersonalization-derealization cycle, making the patient feel alive, rather than empty or dead;
4) *To communicate without words.* NSSI as means to say what words cannot say, or to control behaviors and emotions of others for eliciting caring responses;
5) *To build a memory of oneself.* NSSI as a way to fix self-memories, engraving traces of events, moments, feelings on the skin, thus making them last forever;
6) *To turn into active-to change skin.* NSSI as means to turn experiences lived as passive, lost out or imposed, into active ones.

These organizers may interweave themselves, representing from time to time the core organizer of the behavior. Meaning that self-injuring causes a temporary relief from negative symptoms (i.e., anxiety, depersonalization or desperation) but also refers to

experiences of salvation, healing and protection of one's own structure (Favazza 1996). Far from being a deconstructive passage to the act, it assumes the valence of a self-constructive "act of passage", a paradoxical remedy to get over an unbearable distress, a mean for crossing and conjure the flood of suffering (Le Breton 2003, 2007).

Where does it hurt? Pain perception and its paradoxical paths

When investigating NSSI in individuals with borderline personality disorder, a noteworthy element catches the eye: BPD patients report reduced pain sensitivity or even analgesia during episodes of self-injury, such as cutting or burning. Clinicians are well accustomed to this. Many patients claim to "feel nothing" when self-injuring, "as if they are immune to the body's experience and acknowledgement of tissue destruction – i.e., pain" (Sansone and Sansone 2007, p. 41). A number of empirical studies confirm this evidence, finding the presence of pain attenuation or analgesia in 50-70% of BPD patients who self-injure (Russ et al. 1992, Schmahl et al. 2004, Pavony and Lenzenweger 2014). How to explain it? Several hypotheses have been advanced. Just to name a few, Van der Kolk et al. (1989) suppose the release of endogenous opioids during self-injury. Russ et al. (1999) suggest neurophysiological abnormalities such as increased theta wave activities in the electroencephalogram tracings. McCown et al. (1993) assume the involvement of stress-indulged analgesia, the phenomenon of pain suppression upon exposure to unconditioned or conditioned stressful stimuli. Bohus et al. (2000) propose a process of re-interpretation of pain on a psychological level, mediated by dissociative mechanisms. Ludäscher et al. (2010) confirm that reduced pain sensitivity is a somatic marker of dissociative states in BPD patients and add that pain perception is lower during states of intense aversive tension than during baseline conditions.

Despite all this, however, things remain unclear. In fact, there is another evidence to consider: some BPD patients are actually hyper-sensitive to pain. Clinical observations indicate a difficulty of BPD patients in enduring prolonged acute pain or a tolerance of discomfort, which is of shorter duration than other individuals (Harper 2004). Besides, empirical findings show: a) A high percentage of BPD (30-50%) among patients with chronic pain syndrome, defined as ongoing or recurrent pain lasting from 3 to 6 months (Sansone et al. 2001, Dersh et al. 2002, Tragesser et al. 2010); b) A prevalence of opioid misuse (abuse or dependence) among individuals with BPD (Kaplan and Korelitz 1988, Dulit et al. 1999, Frankenburg and Zanarini 2004). What might explain this second phenomenon? Fewer hypotheses have been advanced. Sansone and Sansone (2007) suggest that it is essentially a problem of self-regulation, which takes the form of difficulty in modulating pain. "As a result, the afflicted individual would seemingly over-experience pain, appear pain intolerant and/or be prone to using excessive amounts of analgesics in an attempt to control pain" (p. 43).

So, where is the truth? Are borderline patients sensitive or insensitive to pain? Both paths seem to be practicable. Sansone and Sansone (2007) call it "the pain paradox" of BPD patients, and they explain it by mainly focusing on the context of the pain experience itself: when pain is self-inflicted (i.e., self-injury), controlled by the individual, of short duration, it can be tolerated and accompanied by psychological mechanisms to enable pain toleration, such as dissociation; vice versa, when pain is endogenous, not under control, continuous, it cannot be tolerated. In other words, borderline patients seem to have a specific inability in modulating, controlling, and managing their experience of pain. Moreover, this inability seems to be mediated by a number of factors, such as: comorbid mood and anxiety disorders, childhood history of trauma with the resulting clinical features of post traumatic stress disorder (i.e., hypervigilance or hyperarousal), and interpersonal dynamics in which eliciting caring responses through symptoms is paramount. Recently, Carpenter and Trull (2015) have been the first to study this abnormality empirically, examining both acute and chronic pain in the same sample. Their finding provides evidence that the combination of BPD features and NSSI history, among non-clinical samples, is linked to a "pain paradox".

Something wrong. Somatic symptoms and other medical stories

If one has a much closer look to the issue of chronic pain in individual with BPD, he runs into another abnormal bodily experience: multiple somatic complaints or somatic preoccupation. This is one of the most difficult areas to investigate due to its being somewhere between medicine and psychology. And this is probably the reason why this topic has been little investigated over time (Sansone and Sansone 2015). However, a few studies found interesting data. The most relevant one is the fact that up to 36% of BPD patients is prone to report somatic symptoms featured this way: diffused (i.e., involving multiple body areas), lacking medical confirmation, and being ever present (Prasad et al. 1990, Hudziak et al. 1996, Zanarini et al. 1998). Moreover, some of these BPD patients may not only develop somatic symptoms but also magnify existing ones (Sansone and Sansone 2006). For example, a study on diabetics outpatients shows that 90% of individuals without BPD can accurately identify their medical complications, while 50% of those with BPD complain symptoms that are not present in medical records (i.e., non existent) (Sansone et al. 2004).

Beside all this, there are other abnormal experiences in medical settings to consider. First of all, a number of BPD patients are associated with excessive health care utilization. More in details, they are most likely to see primary care physicians, as well as having medical appointments, documented prescriptions, contacts with treatment facilities (i.e., telephone calls), and referrals to specialists compared to individuals without this personality disorder (Sansone et al. 1996, Sansone et al. 1998, Sansone et al. 2011). Also, a recent literature review shows that some individuals with BPD tend to seek treatment from plastic surgeons in two different patterns: as treatment for self-injury or as insatiable requests for aesthetic procedures (Morioka and Ohkubo 2014). The authors hypothesize that these patients tend to request corrections for multiple body parts, shifting from one to another over time, in order to avoid abandonment by the surgeon or because of their impulsivity. However, comorbidity with another disorder must be also taken into account, i.e. body dysmorphic disorder (BDD). With respect to this, some studies show that: a) The prevalence of BDD among BPD patients is of 54%; b) The BPD patients with BDD have significantly lower overall functioning and higher levels of BPD pathology, childhood traumatic experiences, suicide attempts, substance and self-harm

than those without BDD; c) Traumatic experiences seem to be significant predictor of comorbid BDD diagnosis in BPD patients (Semiz et al. 2007, Bjornsson et al. 2013).

Finally, Sansone and Sansone (2006) underline the presence of two more BPD bodily abnormal experiences in medical setting: "medical self-sabotage" and factitious disorder. Regarding "medical self-sabotage", the authors highlight that some individuals with BPD (the percentage is not clear) can actively "act against" their medical care, thus having obvious negative consequences for their body and health; examples of this phenomenon can include "exposing oneself to a infected individual with the intent of getting infected; purposefully misusing prescription medications to worsen an illness; not following medical advice to purposefully prolong an illness; and preventing wounds from healing" (p. 134). According to a later Sansone and Sansone's article (2012), these behaviors may function as a "self-harm equivalent". However, as the authors themselves specify, it is not clear why some BPD patients elect to medically self-harm rather than self-harm in more traditional ways (i.e., cutting).

Regarding factitious disorder, instead, the authors report a number of studies associating BPD with factitious illness (i.e. wherein the body is intentionally labeled as defective, now under the section of "Somatic symptoms and related disorders" in DSM-5), paying particular attention on a literature review by Sutherland and Rodin (1990) where clear prevalence rate of BPD (30%) among patients with factitious disorder is reported. Such data, however, are limited and further investigation in this area is needed to propose etiological hypotheses or allow more general conclusions.

Conclusions. The body as a psychopathological organizer?

In conclusion, what can we say about bodily experience in BPD? If one gets into the shoes of the observer, he faces great difficulty in finding a key for understanding so different and contradictory abnormal phenomena. Instead, if one gets into the shoes of the borderline patient, he probably has a less ambiguous but more dramatic experience: that of an "alien object" (Fonagy 1999). This means that the BPD patient has such an instable and fragile experience of himself that he can live his body as a part that sometimes belong to the self and sometimes does not, with a prevalence and pervasiveness of the latter condition. It must certainly not be a pleasant experience of oneself. But perhaps it might be a more bearable experience than others, such as dysphoria. As we recently hypothesized (Rossi Monti and D'Agostino 2014), dysphoria is a typical BPD mood condition, experienced as uncomfortable, negative and oppressive, which exhibits all the characteristics typical of other mood states (it is persistent, devoid of an intentional object, unmotivated, rigid, and difficult to articulate). It indicates an emotional state made by alarmed discontent, unpleasant tension, and chronic irritation (Berner et al. 1987, Gabriel 1987), which is hard to endure, spreading something like a mist or a toxic gas in the borderline's existence and engulfing his perception of and relationship with the world, the others and himself.

In fact, as Doerr-Zegers and Pelegrina-Cetrán (2016) point out, "in dysphoria the patient experiences the world as oppressive and invasive of his/her intimacy. The others are lived as persons demanding answers or actions he/she is not able to fulfill" (p. 7). As a result – the authors argue – the patient's spatial dimension (in terms of "how are you… in the world?") is saturated by four predominant features: 1) *movement*, i.e., the patient's corporal restless always accompanying irritability; 2) *passivity*, i.e., the patient's feeling of being overwhelmed by a state he cannot decide to be in; 3) *transitoriness*, i.e., the fast disappearing of the patient's state of effervescence, discomfort and irritability, when changes are produced in significant interpersonal relationships; 4) *commotion*, i.e., the active participation of the other in the patient's emotional state.

In such condition, everything becomes fuzzy, blurry, uncertain, ambivalent, and incomprehensible. So, looking for an opportunity to turn this senseless but painful state into something that has a cause and a contingent meaning becomes a desperate but vital reaction. The body provides such opportunity. When it bleeds because of self-inflicted wounds, when it feels too much or too little pain, or when it shows multiple somatic symptoms, it is lived by the BPD patient as an object, which is clearly visible, strongly delineated and stands out quite distinctively. Hence, it definitely gives a sense of consolidation when the self-cohesion is limited by inhibition of the capacity to reflect on and integrate mental experiences (Fonagy and Target 1995). In other words, it becomes an invaluable escape route from the unbearability of the dysphoric condition, thus restoring hope. Namely, it assumes the function of a "psychopathological organizer" (Rossi Monti and Stanghellini 1996). And perhaps this is why a number of BPD patients in medical settings end up with employment disability for medical reasons (Sansone et al. 2003), as if this could be an official, visible, "license" to feel "alive, coherent and real" (Fonagy and Target 2000).

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