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Beyond Splitting: Observer-Rated Defense Mechanisms in Borderline Personality Disorder

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Abstract				

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Defense mechanism is a key-concept in the psychoanalytic psychopathology of Borderline Personality Disorder (BPD). Theoretical and emprical elaborations on this question are briefly reviewed and discussed with regard to process-assessment of defense mechanisms; we put forward observer-rater methodology as an accurate means of assessing unconscious in-session processes. A sample of N = 25 patients presenting with BPD were interviewed, as were subjects from a matched control group without psychiatric symptoms (N = 25) using a psychodynamic interview paradigm. These interviews were transcribed and rated using the Defense Mechanisms Rating Scales. The results indicate that compared to controls, BPD patients used higher percentages of a action, borderline, disavowal, narcissistic and hysteric defenses, along with lower levels of mature and obsessional defenses. Overall Defensive Functioning was signficantly lower in the BPD patients, compared to controls. Narcissistic defenses were related with symptom level. These results are discussed in line with previous studies on defensive functioning of BPD and literature on psychoanalytic psychopathology. These results have several important clinical implications.

Key-Words: Borderline Personality Disorder; Defense Mechanisms; Observer-Rated Methodology; Splitting

Beyond Splitting: Observer-Rated Defense Mechanisms in Borderline Personality Disorder

Introduction

In recent years, there is a growing interest in the study of defense mechanisms in psychotherapy and psychopathology (Cramer, 1998a). Use and definitions of the notion of defense mechanisms as psychoanalytic concept have evolved since Freud's writings (Freud, 1926; A. Freud, 1936; see also for a review Cooper, 1998; Kramer, de Roten, Perry, & Despland, 2009; Perry, Beck, Constantinides, & Foley, 2009), becoming a notion that is accessible to empirical investigation. In the context of psychodynamic psychotherapy, it has been underlined that the accurate in-session assessment by the therapist of patient's defenses and his/her working with by addressing them correctly plays an important role in effective intervention (Coughlin della Silva, 1996; Despland, de Roten, Despars, Stigler, & Perry, 2001; Hersoug, Bogwald, & Hoglend, 2003; Perry, 1993; Siefert, Hilsenroth, Weinberger, Blagys, & Ackermann, 2006). Defense mechanisms have been included as a provisional diagnostic axis of DSM (APA, 1994; Perry, Hoglend, Shear, Vaillant, Horowitz, Kardos, Bille & Kagan, 1998). Some effort was spent in delineation of defense mechanisms from neighboring concepts, such as the notion of coping, from a theoretical (Cramer, 1998b, Kramer, 2010a), as well as an empirical viewpoint (Grebot, Paty, & Girard Dephanix, 2006, Kramer, 2010b; Kramer, Despland, Michel, Drapeau, & de Roten, 2010).

The psychopathology of Borderline Personality Disorder (BPD) is particularly interesting for the study of defense mechanisms (Zanarini, & Frankenburg, 2007). Kernberg (1967, 1975), from an object-relations theoretical viewpoint, conceptualized borderline personality organization (a broader concept than the DSM-IV diagnosis of BPD) as being associated with a set of five defense mechanisms, i.e., devaluation, omnipotence, idealization, projective identification and splitting, supported by a sixth, denial. Several of these defenses have been studied related to borderline personality organization, as well as BPD as DSM-IV diagnosis. Splitting is one of those defenses. Borderline personality organization involves a

lack of integration of idealized and persecutory elements of early object representations. This fundamental lack of integration is associated with a high level of identity diffusion on the syndromic level and parallels with, in terms of defensive functioning, splitting of self and other representations (Kernberg, 1975). Like any other defense mechanism, splitting has an adaptive value, in particular in the physically or sexually abused child (Perry & Herman, 1992, p. 134): "The abused child must continue to depend on caretakers who are all powerful, for better or for worse, whether in taking care of the child's basic needs or in threatening or carrying out a painful or injurious assault." According to Koenigsberg (2010), referring to the works by Bower (1981), a consequence of using splitting as defense mechanism may be the presence of "two libraries" of memories: "such patients relate to others in unpredictable fashion, as though their image of the other person is drawn one moment from a library of good representations, and the next as though from a library of bad representations" (Koenigsberg, 2010, p. 75). Using a projective testing procedure (Rorschach), Leichsenring (1999) showed empirically that the process of splitting was associated with other immature defense mechanisms, as well as with high levels of identity diffusion in BPD (compared with neurotic patients). It was also hypothesized that splitting, a process identified in early childhood, may be underpinned by neural substrates (Muller, 1992), in particular in terms of increased hemispheric lateralization. Even if this is a promising research perspective, the neural substrates of splitting are probably more complex (Koenigsberg, 2010). Another defensive process of borderline personality organization, postulated by Kernberg, is projective identification. Along with splitting and dissociation, this defense mechanism protects the BPD patient from anxiety, but at the same time tends to reenact the traumatic experiences from childhood in adult life, which necessitates even more defensive shoring up and contributes to the maintenance, and at times deterioration, of the borderline functioning (Perry & Herman, 1992).

From an empirical point of view, several studies have aimed at delineating BPD from other pathologies and from controls, with regards to defensive functioning. Bond (1990) compared BPD (N = 25) versus other Personality Disorders (PD) versus other diagnoses, using the Defense Style Questionnaire (DSQ), a self-report questionnaire assessing four defense styles (adaptative, self-sacrificing, maladaptive/action and major image distoring/borderline). No differences were found between the groups. Later, Bond, Paris and Zweig-Frank (1994) examined N = 78 female BPD outpatients and compared them to patients presenting with any other PD. BPD patients presented with higher scores on maladaptive/action and major image distorting/borderline defense styles and lower scores on the adaptive defense style. Paris, Zweig-Frank, Bond and Guzder (1996) replicated the aforementioned results on N = 61 male BPD outpatients compared to controls, except that no differences were found for scores on adaptive defenses. Specific defense styles relate to specific criteria of BPD-diagnosis, such as affective instability or impulsivity. Koenigsberg et al. (2001) reported that a number of specific defense mechanisms, assessed by the DSQ, such as undoing, acting out, passive aggression, projection, autistic fantasy, splitting, were associated with BPD. These defense styles are all considered as immature by Vaillant and Drake (1985), except for undoing. Finally, Zanarini, Weingeroff and Frankenburg (2009) conducted a large-scale questionnaire-study using the DSQ including N = 290 inpatients, many of whom met BPD-criteria. Patients presenting with BPD had higher scores on maladaptive/action, major image distorting and self-sacrificing defense styles, compared to controls, whereas the adaptive defense styles did not differ between the groups. Moreover, these authors reported that the defense triad of acting out, emotional hypochondriasis and undoing was the best predictor of the diagnosis of BPD, compared to other PDs (Zanarini et al., 2009).

Even though the afore-mentioned studies point toward the direction of defense specificities associated with BPD and somewhat confirm Kernberg's seminal assumptions, we have to emphasize that from a methodological point of view, and in particular from the point of view of construct validity, assessing defense mechanisms with a self-report questionnaire, when defenses reflect unconscious processes, is potentially problematic (Perry & Ianni, 1998). Questionnaires may be accurate to summarize the conscious (or behavioral) correlates of defense mechanims, (see also Devens, & Erickson, 1998; Sammallahti, & Aalberg, 1995) but fail to assess the defensive process itself, as it occurs in vivo, when the individual faces an internal conflict or affect (see also Shedler, Mayman and Manis, 1993). In order to meet the latter objective, it is necessary to use observer-rated measures. Studies have investigated several diagnostic categories by using valid observer-rated methodology, such as the Defense Mechanisms Rating Scales (Perry, 1990). Perry and Cooper (1986) showed in a total sample of N = 81 patients that action (acting out, passive aggression and hypocondriasis) and borderline defenses (splitting of self and other's images, projective identification) were associated with BPD, which was not the case for anti-social Personality Disorder. These authors found that BPD patients did not use high levels of narcissistic defenses, i.e., omnipotence, devaluation and idealization, as postulated by Kernberg (1975) to be associated with borderline personality organization. An explanation may be the more narrow focus of Perry and Cooper's study on DSM-diagnosis of BPD, whereas Kernberg's notion of borderline personality organization encompasses narcissistic personality functioning. Furthermore, borderline-level defenses predicted psychotic and psychotic-like symptoms in BPD (Perry, 1988). Using the same observer-rated methodology applied on a sample of Bipolar Affective Disorder, Kramer et al. (2009) found a set of five immature defense mechanisms (acting out, projective identification, splitting of other's images, rationalization and omnipotence) to be related to Bipolar Disorder.

The aim of the present study is to delineate defensive functioning in BPD compared to normal controls. We've chosen normal controls, as we are particularly interested in the overall differences between the psychopathology of BPD and those with symptom-free functioning, not the specific differences between BPD and another diagnostic category. We rely on valid observer-rated measure using a standardized and controlled interview and rating procedure. We hypothesize the presence of immature defenses (action, borderline, disavowal and narcissistic) in BPD, as compared to healthy controls. In addition, we hypothesized higher levels of hysterical defenses in BPD, compared to controls. We also will examine the association between these defenses and levels of symptoms, postulating that there will be high correlations between maladaptive defenses and symptom levels.

Method

Sample

A total of 25 outpatients presenting with Borderline Personality Disorder (BPD) were included in the study. Fifteen (60%) were female; the patients had a mean age of 31.1 years (SD = 10.4; ranging from 19 to 55). All patients were French-speaking and had a DSM-IV (APA, 1994) diagnosis of Borderline Personality Disorder, as diagnosed by the Structured Clinical Interview for DSM-IV (SCID-II; First, Spitzer, Williams, & Gibbons, 2004). Mean reliability of axis II diagnoses was satisfactory ($\kappa = .76$); these analyses were performed on independent ratings of video-taped SCID-II interviews on randomly chosen 20% (5) of all cases. Some (10; 40%) presented with co-morbid disorders, such as on axis I major depression (4; 16%). All the following were found once in the entire sample (4% occurrence per category) agoraphobia, dysthymia, bulimia, anorexia, panic disorder, alcohol abuse, somatoform disorder, schizoaffective disorder and on axis II of DSM-IV-R one paranoid (4%) and one narcissistic (4%) PD. SCID-II interviews were done by trained clinicians. Symptom

level, as measured by the Outcome Questionnaire (OQ-45.2), averaged on 96.14 (SD = 21.21).

A strictly matched control group was introduced; matching criteria were gender and age, as these have an influence on defensive functioning (Labouvie-Vief, Hakim-Larson, & Hobart, 1987). A total of N = 25 persons from a French-speaking community sample were recruited for the study. Out of these, 15 (60%) were female; the controls had a mean age of 33.7 (SD = 7.9; range from 23 to 50). Thus, no difference was found with regard to the matching criteria (for age : t(1, 48) = -1.06; p = .30). Controls were screened for psychiatric problems. No inpatient treatment in psychiatry is known for these participants and general symptomatology, as measured by the Global Severity Index (GSI from the SCL-90-R; Derogatis, 1994), was in the normal range for all control participants (M = .47; SD = .23). All participants gave written informed consent. The study was reviewed and approved by the Research Ethics Board of the specific institutions.

Instruments

Defense Mechanism Rating Scales (DMRS; Perry, 1990; French translation: Perry, Guelfi, Despland, & Hanin, 2004). The DMRS is an observer-rater scale assessing 28 defense mechanisms, in which the defenses are ordered based on the empirical hierarchical relationship to adaptation (Perry & Cooper, 1989). Seven levels, ranged according to the criteria of adaptiveness, are included, from the least adaptive to highly adaptive: (1) Action (acting out, passive aggression, hypochondriasis), (2) Borderline or major-image-distorting (splitting of self/object representations, projective identification), (3) Disavowal (denial, rationalisation, projection) and autistic fantasy (for further computation, this defense will be considered on level 3, even if conceptually distinct) (4) Narcissistic or minor image-distoring (omnipotence, devaluation, idealization), (5) Neurotic (repression, dissociation, reaction formation, displacement; this level can be further divided into (5a) Hysterical encompassing

repression and dissociation and (5b) Other neurotic emcompassing displacement and reaction formation), (6) Obsessional (isolation of affect, intellectualization, undoing) and (7) Mature (affiliation, altruism, anticipation, self-assertion, humor, self-observation, sublimation, suppression). Quantitative scoring was used, yielding relative frequency scores (percentages) for each defense level, as well as an Overall Defense Functioning (ODF) score which can be computed by weighting the absolute frequency of the defenses by their level (see Perry and Henry, 2004). Weighting of the percentage by the number of words emitted per 1000 was necessary if the difference in language productivity varies between the groups. Validity and reliability for the DMRS was reported by Perry and Hoglend (1998; see also Perry & Ianni, 1998); Hilsenroth, Callahan and Eudell (2003) reported evidence for the reliability and validity of Overall Defensive Functioning. For the current study, reliability coefficients on 20% (5) of the ratings were established among raters and yielded satisfactory results in terms of intra-class correlation coefficients (2, 1; Shrout, & Fleiss, 1979) varying between .64 and .95 (Mean = . 84; SD = .09). For these reliability analyses, the defensive level was unit of analysis (7 categories).

Outcome Questionnaire-45.2 (Lambert, et al., 2004). This self-report questionnaire encompasses 45 items addressing three main domains of distress: level of symptoms, interpersonal relations and social role. A general sum score is computed which was the score used in this study. A Likert-type scale is used to assess the items, from 0 (never) to 4 (almost all the times). Validation coefficients of the original English version are satisfactory, in particular for internal consistency and sensitivity to change over psychotherapeutic treatment (Vermeersch, Lambert, &Burlingame, 2000). French validation study (for the version used in this study) was carried out by Emond, Savard, Lalande, Boisvert, Boutin and Simard (2004) and yielded satisfactory results. Cronbach alpha for this BPD-sample was .95.

Procedure

All patients and controls were asked to participate in a dynamic interview (Perry, Fowler, & Semeniuk, 2005; Perry, Fowler, & Greif, 2008) lasting 50 minutes. It has been widely used in psychotherapy research (Perry & Cooper, 1989; Hoglend & Perry, 1998). As shown by Perry, Fowler and Semeniuk (2005) and Fowler and Perry (2005), high-quality dynamic interviews are associated with Interviewer and Overall Dynamic Interview Adequacy. Dynamic interview (DI) as a research tool has been developed from clinical practice of psychodynamic psychotherapy; thus, the context of DI is comparable to the context of an intake psychotherapy interview which was the case in our study: all patients presented at an outpatient clinic with a request for psychotherapy. Furthermore, the DI is relatively unstructured and is more similar to psychotherapy sessions than to structured or unstructured diagnostic interview (Beck & Perry, 2008).

The patients were given the questionnaires at the end of the interview and were asked to fill them in and send them back within two days.

The control group was recruited by means of advertisements at two local institutions: (1) School of Social Studies (n = 16); (2) Association promoting Community Activities and Service (n = 9). Matching criteria were transparently issued at the outset of the control group recruitment. Therefore, only nine participants had to be refused from participation due to failure to meet the matching criteria. All of the control participants were given compensation (the equivalent of USD 16 per participant).

All interviews were tape-recorded and transcribed by Master's-level psychology students, according to the method defined by Mergenthaler and Stigler (1997).

Interviews were rated based on the transcripts. All ratings were done by trained raters; reliability of these ratings was established with trained colleagues on a randomly chosen 20% of all interviews (for the results see under Instruments).

Data Analytic Strategy

Multivariate between-group statistics are realized to test our first hypothesis. Pearson's correlation analyses are carried out in order to test the relationship between defenses and symptoms (general and specific symptomatology) for the BPD-group.

Results

Preliminary analyses

We compared the number of words emitted by the subject per session between the groups: the BPD patients produced on average 4470 words (SD = 1056) during the dynamic interview setting, which was less compared to controls who produced on average 7766 words (SD = 2514) in the same setting. This difference in number of words emitted was significant (F(1, 49) = 36.52; p < .00). This result is confirmed by the between-group comparison that showed that the patients produced overall fewer defenses in the dynamic interview setting, compared to matched controls (F(1, 58) = 5.23; p < .05). Thus, as expected, it is necessary to pursue all remaining statistical analyses on weighted relative frequencies by the number of defenses produced by the subject per 1000 words.

Comparison between groups

As expected, comparison between the groups revealed a large effect in terms of overall defensive functioning (ODF; ES = 2.30, see table 1); the BPD patients presented with lower scores of overall defensive functioning than controls. The seven defense levels according to the hierarchy of adaptiveness yielded significant differences: all immature defense levels (Action, Borderline, Disavowal, Narcissistic) are more frequently found in BPD patients, whereas mature and obsessional defenses were more frequently found in control subjects. No significant difference was found for neurotic defense level. Post-hoc ANOVAs on subcategories of neurotic defenses yielded a more differentiated picture: the sub-category of hysterical defenses is more often used by the BPD group, with a medium effect size (F(1, 49))

= 3.04; p = .05; d = .49), whereas the sub-category of other neurotic defenses was not significant (F(1, 49) = .08; p = .78; d = .09).

Relationship to symptom level

Pearson correlations were carried out on a sub-sample of n=21 patients, due to lack of data in four patients' response on the OQ-45, between general symptomatology and defenses. Only the narcissistic level of defenses related to the symptom level, in a negative direction (r=-0.48, p<.03). All the other correlations between symptoms and defensive levels were not significant (mature: r=0.07; obsessional: r=0.19; neurotic: r=0.30; disavowal: r=0.12; borderline: r=0.07; action: r=0.06), as well as with Overall Defensive Functioning (r=0.12). Similar, all non-significant, results are obtained when correlating defenses with the specific symptomatology, *i.e.*, the number of BPD symptoms (according to the SCID-II-interview); this absence of effects might be related to the restricted range of symptoms in BPD patients.

Discussion

Even if the total number of observations in this process-oriented study is relatively low, our results indicate that Vaillant's (1971; see also Semrad, 1967) conception of defensive organization in terms of hierarchy of adaptiveness is particularly relevant for highly disturbed patients, such as presenting with BPD (for earlier empirical demonstration, see Vaillant, 1976; Perry & Cooper, 1989, Perry, 1993). Our first hypothesis, that BPD would use more immature defenses than healthy controls, was confirmed for all four immature defense levels. Defenses especially associated with BPD include more than splitting: Action defenses (acting out, passive aggression, hypochondriasis), Borderline defenses (splitting of self and other's images, projective identification), Disavowal defenses (denial, rationalization, projection, autistic fantasy) and Narcissistic defenses (omnipotence, idealization and devaluation) are associated with BPD. This pattern of results almost perfectly overlaps with earlier results

using observer-rated methodology on BPD (Perry & Cooper, 1986). It is also in line with the results obtained by means of the questionnaire approach investigating defense styles (Bond et al., 1994; Paris et al., 1996), in particular with regard to the higher scores on maladaptive/action and major image-distorting/borderline defense styles associated with BPD. It is noteworthy to say that effect-sizes are at times very large, in particular for Overall Defensive Functioning (ODF; 2.30), along with Action and Disavowal defenses. Nevertheless, these statistical differences need to be interpreted in the light of clinical reasoning; ODF of BPD-patients is at the lower end of disavowal defense range, whereas ODF of healthy controls is at the upper end of narcissistic defense range, which is only a onepoint-difference on the overall seven-point-adaptiveness scale. An example from the disavowal defensive level is the following excerpt from one of our BPD cases: Talking about her parents, a female patient (3207, al. 38) says "my feelings of abandonment are there since my birth, it has pursued me my entire life and it goes on and on and on, because my parents still push me down, down, down. I can't stand it anymore. If I want to leave town, that's why, it's because I want to be free from them because it's unbearable." (rated as projection). Another example, rated as acting-out (female patient 3211, al. 212, talking about her father): "I can't control myself when I'm with him. He makes comments I don't like and I react automatically and we always yell at each other."

In line with Bond et al. (1994), but unlike Paris et al. (1996), we have found lower levels of mature (along with obsessional) defenses in BPD, compared to controls. This result raises the question of the role of mature defenses in the psychopathology of these highly impaired patients. Mature defenses imply a high level of psychological mindedness, mentalization, cognitive and affective resources, such as the ability to establish insight into his/her own functioning. In other studies of patients undergoing psychodynamic psychotherapy and using the same observer-rated methodology, the frequency of mature

defenses was low at the beginning of treatment, whereas their increase over the course of psychotherapy was related to successful outcome (Drapeau, de Roten, Perry, & Despland, 2003; Kramer, Despland, Michel, Drapeau, & de Roten, 2010; Perry, 2001; Perry et al., 2008). Comparing our results to the ones we have found earlier on a sample of patients with Bipolar Affective Disorder (BD; Kramer et al., 2009), using the same methodology, we have to admit that the BPD outpatient sample presents with even lower mean ODF and even more immature defenses that the BD-inpatient group. This shows the particular defensive vulnerability of outpatients with BPD. Further studies should include a clinical comparison group to test these differences empirically.

Post-hoc analyses found higher levels of hysteric defenses in BPD, compared to controls. This is a particularly interesting result, as hysteric defenses (dissociation and repression) are not part of the immature range of defenses. According to Perry and Herman (1992), dissociation is frequently associated with BPD, as a defense shoring up against traumatic memories which in turn are frequently repressed (Van der Kolk, Perry, & Herman, 1991); thus, our observation corroborates earlier results.

The role of narcissistic defenses in BPD is particular (Perry & Cooper, 1986): we found them to be more prevalent in BPD and found a link between narcissistic defenses and symptoms: the more narcissistic defenses the patients used in-session, the fewer symptoms they reported on the self-report assessment of symptoms. To our knowledge, this result was not reported elsewhere so far, but it may underline the immediate adaptive value of these defenses - idealisation, devaluation and omnipotence - which temporarily up-regulate selfesteem, as protective shields against the individual's perception of problems and symptoms. Perry et al. (2009) rated defenses during psychodynamic psychotherapy in a case with both severe BPD and Narcissistic PD in whom, as the borderline defenses decreased over several years, narcissistic defenses which were already present at intake increased before beginning to decrease. Thus, narcissistic defenses play a temporary reparative role, suggesting that patients with both defense levels are better regulated than those with only the borderline level. Whilst understanding the immediate adaptive value of narcissistic defenses is in line with modern conceptions of defense mechanisms (see Cooper, 1998 for a review), we do not forget their negative effects of these immature defenses on therapeutic evolution over the course of dynamic psychotherapy (Kernberg, 1975; Perry, 1993). Interestingly, Kramer et al. (2009) found the opposite effect for narcissistic defenses in Bipolar Affective Disorder (BD). The more these patients used omnipotence and devaluation, the higher they scored on the manic symptoms scale. For BPD patients, narcissistic defenses serve as a momentary protective shield, whereas for BD patients, the same defenses are linked to a symptomatic vulnerability. May the effects of narcissistic defenses be used as a psychodynamically informed way or delineating these two disorders? This questions definitely warrants further specific investigation.

Several clinical implications of our results may be noted. Early assessment of defensive functioning, as it unfolds in session, is important in psychodynamic psychotherapy, in particular with highly disturbed individuals such as BPD patients. Immature defenses, *i.e.*, action and borderline defenses, require that the therapist be particularly attentive to the patient's psychodynamic fragility. Coughlin della Silva (1996) underlined the importance of addressing these defenses, as they may hinder the construction of a positive therapeutic alliance. Perry (Perry, 1993; Perry & Bond, 2007) promoted the use of supportive techniques in this stage of therapy, along with early-in-the process defense interpretations aiming at a higher awareness in the patient of his/her defensive functioning. Similar recommendations have been noted by Yeomans, Clarkin and Kernberg (2002), in the context of transference-focused therapy for BPD (for empirical evidence related to interpretation in the context of psychodynamic psychotherapy, see Hoglend et al., 2006, 2008).

We acknowledge several limitations of our study. The sample size is modest, but sufficiently large for the conduct of multi-variate analyses. Psychotic defenses (or level of defensive dysregulation; Perry, 1993) were not taken into account in this asssessment. This may be a particularly interesting follow-up research question, as Perry (1988) reported an association between borderline defenses and psychotic symptoms. So far, the methodologies used did not allow the assessment of psychotic defenses, but recently, efforts are directed towards the extension of the Defense Mechanism Rating Scales to psychotic defenses (Berney et al., 2009; Piasentin et al., 2001). The participants in the control group were not randomly chosen due to the matching procedure and the voluntary status of participation; their defensive profiles should not be generalized to entire populations. History of abuse was not assessed, nor was the level of intelligence nor education, which might have been related to defensive functioning. Finally, as defenses are not static but dynamic process, multiple assessments over time would yield a better estimate of the mean and range of defensive functioning, in which state effects can contribute up to half of the variance (Perry, 2001), helping to sort out state- from trait-effects in any study group.

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Table 1

Defense Specificities in Borderline Personality Disorder

Defense	Patients $(N = 25)$		Controls $(N = 25)$		F (1, 58)	ES
	M	SD	M	SD		
DMRS						
Number of defenses	24.92	5.64	30.40	10.30	5.23*	.66
ODF	3.29	.69	4.79	.61	65.98**	2.30
Mature	1.81	1.99	3.36	2.89	4.87*	.62
Obsessional	1.65	2.13	3.83	2.79	9.64**	.88
Neurotic	2.26	2.47	1.34	1.10	2.90	.48
Narcissistic	3.30	3.37	1.69	1.25	4.97*	.63
Disavowal	7.26	2.88	3.63	1.85	28.27*	1.50
Borderline	1.43	1.89	.39	.65	6.68*	.74
Action	5.79	3.88	.53	.66	44.64**	1.89

Note. MANOVA: F(7, 42) = 14.89; p = .00. ODF: Overal Defensive Functioning; ES: Effect size (Cohen's d); All defenses are weighted by the number of words emitted per 1000. * p < .05; ** p < .01.