

A study of the similarity between three models of interpersonal functioning of patients with borderline personality disorder. Submitted as a brief research report

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Summary

Dysfunctional interpersonal patterns are a defining feature of Borderline Personality Disorder (BPD). A number of studies have aimed to determine if there are specific patterns in the interpersonal functioning of patients with BPD. The vast majority of these studies have used a widely-used rating system called the Core Conflictual Relationship Theme method [1]. To date, three main models of interpersonal functioning of patients with BPD have been developed using the CCRT [2, 3] including one model developed by our team [4]. The aim of this study was to examine to what extent these three empirically-derived models of interpersonal functioning in patients with BPD overlap.

borderline personality disorder / core conflictual relationship theme / CCRT / BPD / personality disorders / Interpersonal Functioning

Borderline personality disorder (BPD) is characterized by significant and pervasive impairment in interpersonal functioning [5]. Indeed, studies have shown that a diagnosis of BPD can be established with near-perfect certainty based on two features: identity disturbance and intense and unstable relationships [6, 7, 8]. Proposed amendments to the diagnostic criteria for BPD in the DSM-V also specify that a person must have significant impairment in 'personality functioning in relation to self' and impairments in 'interpersonal functioning' [9]. The 'self' is described as how patients perceive themselves and how

they identify and venture toward their goals in daily life. The criteria for 'interpersonal functioning' relates to how well the patient understands the viewpoint of another [9].

Interpersonal functioning is therefore a key determinate for the diagnosis of BPD. However, researchers have moved beyond determining that patients with BPD have impaired interpersonal functioning; they have also attempted to identify interpersonal templates or patterns that distinguish patients with BPD from other patients. A number, if not most of these studies did so using the Core Conflictual Relationship Theme (CCRT) method [10, 11], a widely-used system to rate and document the interpersonal functioning of individuals. The rating process begins by soliciting narratives referred to as relationship episodes from the research participants or patients, then transcribing these narratives verbatim. These transcriptions are then rated by trained raters on three components defined in the CCRT method: the Wish, the Response from

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Other (RO), and the Response from Self (RS). A "Wish" is defined by Luborsky and Crits-Christoph [1] as any expression of desire, need, or intention expressed by the patient. An RO refers to statements describing how the other person responded or reacted to the patient's Wish [6]. Finally, RS statements include the thoughts, feelings, and reactions the patient had as an outcome to the other person's response. For each of the three components (Wish, RO, and RS), the method describes eight clusters that each reflect different behaviors, feelings or thoughts (see Tab. 1 – *next page*).

In a first CCRT-based study, Chance and colleagues [2] investigated the interpersonal patterns of 11 patients with BPD with a history of suicidal attempts and 11 individuals with BPD with no history of suicidal behavior (see Tab. 1). Results showed that patients with BPD who were hospitalized for suicide attempts generally had similar relationship patterns as those with no history of a suicide attempt. Chance and colleagues [2] found that in interpersonal situations, the most prevalent wish of patients with BPD was a wish to be loved and understood (Wish Cluster 6). The second most prevalent wish was a wish to be close and accepting of others (Wish Cluster 5). The most prevalent RO (Response of Other) cluster was RO-5 (others are rejecting and opposing), followed by RO-7 (others like me). For the Response of Self component, the most prevalent was RS-7 (I feel disappointed and depressed), and RS-2 (I am unreceptive).

In a second study, Diguier and colleagues [3] investigated differences between psychotic, borderline, and neurotic personality organizations (POs), as defined by Kernberg [12, 13]. A total of 120 participants were assigned to each of the three PO groups; the Psychotic group ($n = 20$) group included schizoid, schizotypal, and paranoid subtypes; the Borderline group ($n = 31$) included narcissistic, dependent, passive-aggressive, infantile, borderline and antisocial subtypes; and the Neurotic group ($n = 31$) included masochistic-depressive, obsessive-compulsive disorder, hysterical subtypes, and an absence of BPD characteristics. The two most prevalent wishes in the BPO group were a wish to be distant and avoid conflict (W-4) and a wish to be loved and understood (W-6). The most prevalent responses from other were rejection and opposition (RO-5) and others

getting upset (RO-3). In interpersonal situations, patients with a BPO most often ended up feeling disappointed and depressed (RS-7) and anxious and ashamed (RS-8).

More recently, we [14, 15] examined the narratives from a total of 158 patients, 77 of whom had a diagnosis of BPD (see also [4]; Tab. 1). The remaining 81 patients had been diagnosed with other personality disorders. Like in the previous two studies, the CCRT method was employed to score the relationship episodes described in the participants' narratives. The results showed that patients with BPD wished to be loved and understood (Wish-6) but also wished to be distant from others and to avoid conflicts (Wish-4) in interpersonal situations. For the Response of Others (RO) component, RO-5 (others are rejecting and opposing) and RO-8 (others are understanding) were most prevalent. For the Response of Self component of the CCRT, the most prevalent were RS-7 (I am disappointed and depressed) and RS-8 (I am anxious and ashamed [15]).

While our model led to a number of follow-up studies that aimed to further examine the interpersonal functioning of patients with BPD [14, 16, 17], the question remained as to how this model was comparable to those of Chance and colleagues [2] and of Diguier and colleagues [3]. Indeed, given a number of differences in the findings of the three research teams, it is important to determine to what extent our model is comparable to the other two models. Failing to find similarities between our model and the models of Chance and Diguier could indicate not only differences in the samples used or possible differences in the use of the CCRT method, but also that there is more randomness in the interpersonal functioning of patients with BPD than previously. Hence, this study aimed to examine how the model proposed by Drapeau and colleagues [4] is correlated with those of Chance and colleagues [2] and Diguier and colleagues [3]. This study also examined if the latter two models are correlated.

METHOD

A complete description of the three studies examined here, the samples, and the CCRT method can be found in the original material of the three research teams [2, 3, 4, 14, 16, 18, 19].

Table 1. Wish, RO, and RS Cluster distributions according to Drapeau et al. [4], Chance et al. [2], and Diguer et al. [3]: Mean %, Rank ordering, Confidence Intervals, and Correlations

Cluster	Chance et al. [2]			Diguer et al. [3]			Drapeau et al. [4]	
	Mean %	Rank	Within C.I. ?	Mean %	Rank	Within C.I. ?	Mean %	Rank
W 1. To assert and be independent	9.2	6	□	N.A.	7	N.A.	10.7	5
W 2. To oppose, hurt and control others	4.0	7	□	N.A.	6	N.A.	5.1	7
W 3. To be controlled, hurt, not responsible	18.1	3		N.A.	8	N.A.	5.2	6
W 4. To be distant and avoid conflict	10	4		N.A.	1	N.A.	20.4	2
W 5. To be close and accepting	19.5	2	□	N.A.	3.5	N.A.	20	3
W 6. To be loved and understood	27.3	1		N.A.	2	N.A.	23.5	1
W 7. To feel good and comfortable	9.7	5		N.A.	5	N.A.	3.9	8
W 8. To achieve and help others	2.2	8		N.A.	3.5	N.A.	11.2	4
<hr/>								
Spearman between Drapeau [4] and ...	0.52			.76**				
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RO 1. Strong	1	8		N.A.	8	N.A.	3.8	8
RO 2. Controlling	5.3	5	□	N.A.	7	N.A.	7	6
RO 3. Upset	12.2	3	□	N.A.	2	N.A.	13.1	3
RO 4. Bad	5	6	□	N.A.	5	N.A.	3.9	7
RO 5. Rejecting and opposing	54	1		N.A.	1	N.A.	36.8	1
RO 6. Helpful	5.6	4		N.A.	6	N.A.	13	4
RO 7. Likes me	12.6	2		N.A.	3	N.A.	9	5
RO 8. Understanding	4.3	7		N.A.	4	N.A.	13.4	2

table continued on next page

Spearman								
between Drapeau [4]	0.57				.79**			
and ...								
RS 1. Helpful	9.2	4		N.A.	5	N.A.	6	7
RS 2. Unreceptive	14.4	2		N.A.	6	N.A.	9.2	5
RS 3. Respected and accepted	7.5	6		N.A.	3.5	N.A.	15.5	3
RS 4. Oppose and hurt other	6.6	7	□	N.A.	7	N.A.	7	6
RS 5. Self-controlled and self-confident	3.5	8		N.A.	8	N.A.	5.6	8
RS 6. Helpless	10.4	3		N.A.	3.5	N.A.	13.7	4
RS 7. Disappointed and depressed	40.5	1		N.A.	1	N.A.	26.5	1
RS 8. Anxious and ashamed	7.9	5		N.A.	2	N.A.	16.5	2
Spearman								
between Drapeau [4]	0.55				.93***			
and ...								

p value < *0.05; **0.01; ***0.001; N.A. = not available; C.I. = confidence interval within 95% .
The clusters were rank ordered based on mean %.

Spearman correlations were used to examine to what extent our model is correlated with the other two models. Although Diguer and collaborators [3] did not report relative frequencies for each CCRT cluster, they provided sufficient information for us to rank order the different CCRT Clusters, hence making the use of Spearman correlations possible. **Chance and colleagues** [2] did report the percentage of subjects presenting each component. The relative frequency for each component was calculated in order to compare our model with theirs. As rank ordering was now possible, both Spearman and Pearson correlations were used to determine how Chance's model was correlated with ours. Chance and colleagues also reported sufficient data for us to examine confidence intervals at the 95% level.

RESULTS

For the Wish Clusters, our findings correlated significantly with Diguer's findings, $r_{\text{Spearman}}=0.76, p=0.01$ (see Tab. 1), but not with Chance's model, with $r_{\text{Spearman}}=0.52, p=0.09$ and $r_{\text{Pearson}}=0.55, p=0.07$. However, the mean percentages of Wish Clusters 1, 2, and 5 proposed by Chance fell within the confidence intervals derived from our data. For the Wish Clusters, Diguer and Chance's models were not significantly correlated ($r_{\text{Spearman}}=0.29, p=0.25$). Results were similar for the RO Clusters. Spearman correlations showed that our model is significantly correlated with Diguer's ($r_{\text{Spearman}}=0.79, p=0.01$). A trend was found when correlating our model with Chance and colleagues' model ($r_{\text{Spearman}}=0.57, p=0.07$). When comparing relative means of the RO Clus-

ters, our model and Chance's model, though not found to be correlated using the Spearman's coefficient, were highly correlated using the Pearson coefficient ($r_{\text{Pearson}}=0.94$, $p = 0.001$) with RO Clusters 2, 3, and 4 falling within our confidence intervals. Diguier's and Chance's models were also significantly correlated ($r_{\text{Spearman}}=0.76$, $p=0.01$).

For the RS Clusters, our model correlated highly with Diguier's model ($r_{\text{Spearman}}=0.92$, $p=0.001$). A trend was found with Chance's model ($r_{\text{Spearman}} = 0.55$, $p=0.08$). When comparing mean percentages per se, the findings for our Cluster distributions were not significantly correlated with Chance's model using the Spearman coefficient, but were highly correlated using Pearson's ($r_{\text{Pearson}}=0.80$, $p=0.01$), with RS Cluster 4 falling within our confidence intervals. Diguier and Chance's models were also significantly correlated ($r_{\text{Spearman}}=0.61$, $p=0.05$).

DISCUSSION

Our findings for the CCRT Wish Cluster distribution generally matched Diguier's [3] and Chance's [2] findings. The Wish "to be loved and understood" was the most prevalent cluster for both Drapeau [4] and Diguier [3], and was the second most prevalent cluster for Chance and colleagues [2]. The Wish "to be distant and avoid conflict" was also among the top two most prevalent clusters for Drapeau [4] and Diguier [3]. The overall cluster rankings between Drapeau [4] and Diguier [3] were significantly correlated, suggesting that both models corroborate one another. Interestingly, the two most prevalent Wish clusters identified in the narratives of patients with BPD were contradictory in nature, that is the Wish "to be loved and understood" is opposite in nature to the Wish to be "distant and avoid conflict," the latter suggesting a retreat from the interaction. These inconsistent Wish patterns are believed to lead to the communication of mixed messages between patients with BPD and significant others, which in turn may contribute to unstable relationships [6, 7, 20].

For the Response of Others (RO) Clusters, "others are rejecting and opposing" was found to be the most prevalent response of others in all three models. This is consistent with the research

of Gunderson and others [7, 8] who reported that sensitivity to rejection is an important element to the interpersonal phenotype associated with BPD. Although there were no matches found for the second most prevalent ROs among any the studies, the overall rankings for the Drapeau [4] and the Diguier [3] studies were significantly correlated.

Finally, the Response of Self "I am disappointed and depressed" (RS-7) was the most prevalent across all three models. A match for the second most prevalent cluster "anxious and ashamed" was also found between Drapeau [4] and Diguier [3]. These findings are congruent with the work of Kernberg [13] who identified characteristics such as narcissism, shame, anxiety, and fear of potential abandonment, to be contributing elements shaping borderline functioning. It is possible that Responses of Self involving anxiety and shame are the results of others being (RO) "rejecting and opposing" which in turn lead to the Wish to "be distant and avoid conflict," thus leaving them with the unanswered Wish to "be loved and understood."

These findings are also generally congruent with a number of follow-up studies examining different aspects of the interpersonal functioning of patients with BPD. For example, Drapeau and Perry [14] investigated whether the interpersonal patterns of patients with BPD were different from those found in individuals with other personality disorders. The researchers found that the former expressed more "wishes to be distant" and to "be like others," as well as more wishes to "to be hurt by others," than patients diagnosed with other personality disorders. Patients with BPD had a higher tendency to perceive others as controlling and bad [8]. Patients with BPD were also shown to be less open and helpful than those diagnosed with a personality disorder other than BPD [16]. The same study showed that BPDs were less self-confident than non-BPDs [16]. Other significant group differences included: patients with BPD having more wishes to be distant, being less open, and ROs that were generally more negative, when compared to the patients with other personality disorders. Finally, consistent with Chance and colleagues [2], patients with BPD reported others as controlling significantly more often than patients with other Axis II disorders.

The findings for the models presented in our study, using the CCRT method, appear to be generally robust. Our earlier findings (Drapeau [4]) matched those of Diguier [3]. However, it appears that our model was slightly less convergent with Chance and colleagues' model [2], possibly because of the small sample size in this latter study. Although the CCRT method is a widely accepted tool for clinical research on interpersonal behaviors, the method does have some limitations. For instance, the focus of the CCRT method is the interpersonal patterns expressed by respondents within a therapeutic setting. It is presumed that within the therapeutic setting, a kind of "snapshot" into the patient's behaviors outside of therapy can be obtained. Also, one cannot accurately assess the possible meaning of an intention or a behavior without considering the context. The present study does demonstrate some convergence between different models on key factors.

REFERENCES

1. Luborsky L, Crits-Christoph P. Understanding transference: The Core Conflictual Relationship Theme. Basic Books: New York, NY. 1990.
2. Chance SE, et al. Core conflictual relationship themes in patients diagnosed with borderline personality disorder who attempted, or who did not attempt, suicide. *Psychother Res.* 2000; 10(3): 337–355.
3. Diguier L, et al. The core conflictual relationship theme of psychotic, borderline, and neurotic personality organizations. *Psychother Res.* 2001; 11(2): 169–186.
4. Drapeau M, et al. The interpersonal functioning of individuals diagnosed with borderline personality disorder: A review of existing empirical models and suggestions for a new model, in Canadian Psychological Association 70th Annual Convention. Montreal, Canada. 2009.
5. Diagnostic and Statistical Manual of Mental Disorders. 4th, Text Revision ed2000, Washington, DC. American Psychiatric Association.
6. Clarkin JF, et al. Evaluating three treatments for borderline personality disorder: a multiwave study. *Am J Psychiat.* 2007; 164: 922–928.
7. Gunderson JG. Disturbed relationships as a phenotype for borderline personality disorder. *Am J Psychiat.* 2007; 164(11): 1637–1640.
8. Gunderson J, Lyons-Ruth K. BPD's interpersonal hypersensitivity phenotype: A gene environment transactional model. *J Pers Disord.* 2008; 22(1): 22–41.
9. American Psychiatric Association DSM-5 Development. DSM-5 Revisions for Personality Disorders Reflect Major Change APA News Release [Internet]. [updated: 2011 July 7; cited: 2011 release No. 11-36]. Available from: <http://www.dsm5.org/Newsroom/Documents/DSM-5-Revisions-for-Personality-Disorders-Reflect-Major-Change-.pdf>
10. Barber JP, et al. A comparison of core conflictual relationship themes before psychotherapy and during early sessions. *J Consult Clin Psych.* 1995; 63(1): 145–148.
11. Luborsky L, Crits-Christoph P. Understanding transference; The Core Conflictual Relationship Theme method. American Psychological Association: Washington, DC, US; 1998. p. 379.
12. Kernberg OF. Severe personality disorders: Psychotherapeutic strategies, New Haven, CT: Yale University Press. 1984.
13. Kernberg OF. A psychoanalytic theory of personality disorders. Major theories of personality disorder, New York: Guilford Press. 1996.
14. Drapeau M, Perry JC. The core conflictual relationship themes (CCRT) in Borderline Personality Disorder. *J Pers Disord.* 2009; 23(4): 425–431.
15. Drapeau M, Perry JC, Lefebvre R. An examination of core conflictual relationship theme components in adults with BPD in Society for Psychotherapy Research (SPR) International Meeting, Montevideo, Uruguay. 2001.
16. Drapeau M, Perry JC, Koerner A. Interpersonal behaviours and BPD. Are specific interpersonal behaviours related to borderline personality disorder? An empirical study using the Core Conflictual Relationship Theme standard. *Archives of Psychiatry and Psychotherapy.* 2010; 3: 5–10.
17. Drapeau M, Perry JC. Interpersonal conflicts in borderline personality disorder: An exploratory study using the CCRT-LU. *Swiss J Psychol.* 2004; 63(1): 53–57.
18. de Roten Y, et al. Yet another look at the CCRT: The relation between core conflictual relationship themes and defensive functioning. *Psychother Res.* 2004; 14(2): 252–260.
19. Drapeau M, Perry JC, Koerner A. An Empirical Examination of Three Models of the Interpersonal Functioning of Patients with Borderline Personality Disorder. *Psychiatry: Interpersonal and Biological Processes.* 2009; 72(2): 143–153.
20. Gunderson J. Borderline personality disorder. Washington DC: American Psychiatric Press. 1984.